

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**AIR FORCE INSTRUCTION 13-112, VOLUME 1**



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***Space, Missile, Command, and Control***

**JOINT TERMINAL ATTACK CONTROLLER  
(JTAC) TRAINING PROGRAM**

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This volume implements Air Force Policy Directive (AFPD) 13-1, Theater Air Control System, and supports AFI 13-112, Volume 2, Joint Terminal Attack Controller Standardization/Evaluation Program. It establishes the minimum Air Force standards for training and qualifying Air Force personnel as a Joint Terminal Attack Controller (JTAC) to control close air support (CAS) and other offensive air operations, and aligns with the Joint CAS Action Plan Memorandum of Agreement 2004-01 (JTAC MOA). It supplements Air Force Specialty Code (AFSC)-based continuation and upgrade training programs. This volume applies to all Air Force military and civilian personnel (including Air National Guard [ANG] when published in ANG INDEX 1, and Air Force Reserve Command [AFRC]) engaged in JTAC training. See paragraph 1.6. for procedures to supplement this volume. Follow paragraph 1.7. for procedures for submitting changes and recommendations to improve this volume.

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## \*SUMMARY OF CHANGES

This change designates MAJCOM/A3 (3-letter) as the waiver authority for requirements listed in this instruction, unless otherwise noted. Allows for use of live-fly Close Air Support (CAS) missions or CAS practical exercises to replace simulator controls in initial qualification training, mission qualification training and continuation training when simulators are inoperable. Adds award of SEIs 279 and 280. Clarifies various continuation training requirements and changes frequency of some tasks. Moves the certification of JTAC Instructors to AFI 13-112, Volume 2, *Joint Terminal Attack Controller (JTAC) Standardization/Evaluation Program*. Recommends removal from AFSC 1C4X1 for those individuals who do not complete Initial Qualification Training, twice, due to academic failure or non-progression. Adds reference to AFI 13-114V1, *Air Support Operations Center (ASOC) Training Program*. Adds Air Force Specialty Code 13LXX (when established) as authorized for award of the “U” suffix. A margin bar (|) indicates newly revised material.

<b>Chapter 1—POLICIES AND RESPONSIBILITIES .....</b>	<b>4</b>
1.1. Introduction. ....	4
1.2. Policies. ....	4
Table 1. 1 - Personnel Authorized to Perform JTAC Duties .....	5
Figure 1.1. ACC Form 206, Individual Mission Gradesheet Page 1 .....	8
Figure 1.2. ACC Form 206, Individual Mission Gradesheet Page 2 .....	9
1.3. Responsibilities. ....	9
Table 1.2. Responsibilities. ....	9
1.4. Waivers. ....	13
1.5. Deployments. ....	13
1.6. Supplements. ....	13
1.7. Changes. ....	14
1.8. Individual JTAC Transfers. ....	14
Figure 1.3. Sample AF IMT 3130 .....	14
Figure 1.4. Sample Joint Terminal Attack Controller (JTAC) Mission Log .....	15
Figure 1.5. DELETED .....	15
<b>Chapter 2—JTAC INITIAL QUALIFICATION TRAINING .....</b>	<b>16</b>
2.1. General. ....	16
2.2. JTAC IQT Training. ....	17
Table 2.1. Joint Terminal Attack Controller IQT/MQT Program. ....	18
Figure 2.1. Sample AF IMT 797 Part 1 .....	27
Figure 2.2. Sample AF IMT 797 Part 2 .....	28
<b>Chapter 3—MISSION QUALIFICATION TRAINING .....</b>	<b>29</b>

3.1.	General.	29
3.2.	Initial JTAC MQT.	29
<b>Chapter 4—COMBAT MISSION READY REQUIREMENTS</b>		<b>30</b>
4.1.	JTAC CMR Status.	30
4.2.	JTAC Non-Combat Mission Ready (N-CMR) Status.	30
<b>Chapter 5—CONTINUATION TRAINING</b>		<b>32</b>
5.1.	General.	32
5.2.	Continuation Training Program. Table 5.1.	32
5.3.	Terminal Attack Control Requirements.	32
5.4.	JTAC Decertification.	33
Table 5.1.	Joint Terminal Attack Controller Continuation Training Program	33
<b>Chapter 6—JTAC EVALUATION FOLDER</b>		<b>38</b>
6.1.	Purpose.	38
6.2.	Description of Folders.	38
<b>Chapter 7—JOINT TERMINAL ATTACK CONTROLLER - INSTRUCTOR (JTAC-I) REQUIREMENTS</b>		<b>40</b>
7.1.	General.	40
7.2.	JTAC-I Prerequisites and Certification.	40
7.3.	Chief JTAC-I Prerequisites and Certification.	40
7.4.	Formal Schoolhouse JTAC-I.	40
Table 7.1.	DELETED	42
<b>Chapter 8—THEATER AIR CONTROL TRAINING INFORMATION COMPUTER SYSTEM (TACTICS) --</b>		<b>43</b>
8.1.	General.	43
8.2.	Responsibilities for TACTICS.	43
<b>Chapter 9—INFORMATION COLLECTION, RECORDS AND FORMS</b>		<b>44</b>
9.1.	Information	44
9.2.	Records.	44
9.3.	Forms	44
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>45</b>

## Chapter 1

### POLICIES AND RESPONSIBILITIES

**1.1. Introduction.** A JTAC is a qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in close air support and other offensive air operations. A qualified and current JTAC will be recognized across the Department of Defense as capable and authorized to perform terminal attack control (JP 3-09.3, Change 1). Standardized training ensures all JTACs are capable of providing effective air control for all counterland operations, particularly Close Air Support (CAS). The complexity of integrating CAS with fire support and maneuver units requires a detailed understanding of air and space power. This instruction provides the minimum training required for personnel to attain/maintain JTAC Combat Mission Ready (CMR) status. Air Force JTACs meet all of the requirements outlined in the JTAC MOA and Joint Publication 3-09.3, *Joint Tactics, Techniques, and Procedures for Close Air Support (CAS)*.

**1.2. Policies.** This instruction provides guidance for conducting a JTAC Training program that will complement AFI 36-2201, Volume 3, *Air Force Training Program On The Job Training Administration*. The unit's JTAC training program is governed by this AFI, and supplemented in an operating instruction (OI). The unit's JTAC training program must be included in the training OI developed in accordance with AFI 13-113 Volume 1, *Tactical Air Control Party (TACP) Training Program*, AFI 13-114, Volume 1, *Air Support Operations Center Training Program* (when published), or in an OI developed separately. Group commanders may combine group and squadron training functions/responsibilities into one unit OI when practical. The unit's training program must be tailored to meet the unit's Designed Operational Capability (DOC) statement, and probable contingency taskings outside of those missions identified in the unit's DOC statement. It should be conducted in conjunction with joint training exercises to the maximum extent possible.

1.2.1. JTAC Training Program. Training objectives must balance the need for realism against the expected threat when executing JTAC mission essential tasks. Applying Air Force flight/ground safety standards is paramount during the conduct of JTAC training.

1.2.2. JTAC Training Missions. Units will design JTAC training missions to: achieve combat capability in mission tasks, enhance mission accomplishment, and comply with safety standards.

1.2.2.1. During training, JTACs will use applicable tactics, techniques, and procedures to develop realistic training scenarios (e.g., appropriate use of code words, authentication procedures, combat tactics, tactical deception and concealment, threat reactions, intelligence briefings/debriefings, and Battle Damage Assessment [BDA] reports).

1.2.2.2. To the maximum extent practical, all training will include the use of live, inert or training ordnance, artillery and mortar fire support, threat simulators, countermeasures, and target marking techniques.

1.2.2.3. During Mission Qualification Training (MQT) and Continuation Training (CT) units (non-Air Force Special Operations Command [AFSOC]) must use the Theater Air Control Training Information Computer System (TACTICS) to satisfy academic, testing and task evaluation requirements when the academic training module is available on the system. See Chapter 8 for specific TACTICS information. If the TACTICS lesson module is not completed and posted on the TACTICS website, the unit must create/maintain those JTAC lesson plans.

1.2.3. The academic training portion of JTAC training may be provided by any individual with expertise in that subject with approval by the unit commander or their designated representative.

1.2.4. If JTAC trainees are controlling live-fly aircraft, a **Joint Terminal Attack Controller - Instructor (JTAC-I) must be physically located with the trainee** and be capable of immediately assuming direct control of the aircraft if necessary. JTAC-Is directly supervising JTAC trainees in IQT or MQT may count up to two of these controls (to include night, live and laser controls) toward the JTAC-I's currency requirement per 6 month period.

1.2.5. The JTAC-I or JTAC responsible for the control, must conduct a thorough risk assessment if attack aircraft are going to deliver expendable ordnance (live/inert/training), using AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*, or the U.S. Air Force ORM pocket guide.

1.2.6. Personnel Authorized to Perform JTAC Duties. Table 1.1 lists all Air Force personnel authorized to perform JTAC duties, these personnel must meet the requirements of this instruction as stated:

Table 1. 1 - Personnel Authorized to Perform JTAC Duties

PERSONNEL	YES	NO
* 1C4X1 Personnel assigned to unit type code (UTC) position requiring Special Experience Identifier (SEI) 914	X	
* ALOs assigned to a TACP UTC that requires JTAC qualification or those designated as JTACs by the Unit Commander	X	
1C2X1, Combat Control Operators designated as JTACs by Unit Commander	X	
13DXB, Special Tactics Officers designated as JTACS by Unit Commander	X	
* JTAC-Instructor (JTAC-I) and Chief JTAC-I	X	
*/** Chief Standardization and Evaluation (Stan/Eval) & Stan/Eval Examiners	X	
* Battalion ALO (BALO)	X	
1C4X1, 1C2X1, 13DXB personnel performing tactical range control or test and evaluation duties	X	
1C4X1 or 1XXXU in TACP/ASOC UTCs authorized by ASOS/ASOG commander based on unit mission requirements	X	
Air Force civilians whose official duties require terminal attack control	X	
*** Personnel authorized to perform JTAC duties as a Forward Air Controller (Airborne) FAC(A)	X	
Individuals permanently deferred from worldwide mobility or permanently disqualified for unrestricted worldwide service (AFSC 1C4X1 only)		X
PERSONNEL	YES	NO
Individuals permanently deferred from carrying weapons		X
Individuals unable to perform duties due to Uniform Code of Military Justice (UCMJ) action or other adverse action (e.g. administrative or civil)		X
Individuals identified as drug or alcohol dependant		X
Individuals enrolled in a substance abuse/dependency program		X
Individuals authorized in this table who are reclassified as NOT drug or	X	

alcohol dependent by medical authority and approved by Group commander		
Individuals who proclaim and are granted conscientious objector status		X
Individuals who do not possess a security clearance		X
Individuals who lack normal color vision or depth perception IAW AFI 48-123, <i>Medical Examinations and Standards</i>		X

**Notes:**

“\*” indicates personnel who MUST maintain JTAC CMR qualification

“\*\*” See AFI 13-112, Volume 2 for description

“\*\*\*” Must meet FAC(A) training requirements of their AFI 11-MDS series/the FAC(A) MOA

1.2.7. Use of attack helicopters. Attack helicopter controls may be counted towards a JTAC's training requirements in Initial Qualification Training (IQT), Mission Qualification Training (MQT) and Continuation Training (CT) phases only if all requirements of paragraph 1.2.9. in this AFI are met. No more than two of the required twelve graded controls during IQT and MQT, combined, may utilize attack helicopters. No more than two attack helicopter controls may be counted towards a JTAC's CT requirements every six months (to include night, laser and live terminal attack control currency). Additional attack helicopter controls may be accomplished to increase proficiency.

#### 1.2.8. JTAC Training Schedule and Review.

1.2.8.1. JTAC Training is based on a sliding calendar. Events requiring semi-annual currency must be conducted every six months. Events requiring annual currency must be accomplished once every 12 months. Events requiring biennial currency must be accomplished once every 24 months.

1.2.8.1.1. Semi-annual training example. A JTAC who accomplishes a task required every six months on 28 December 2007, must re-accomplish that task by midnight, 27 June 2008.

1.2.8.1.2. Annual training example. A JTAC who accomplishes an annual training item 1 January 2008 must re-accomplish that event by midnight, 31 December 2008.

1.2.8.1.3. Biennial training example. A JTAC who accomplishes a biennial training item 1 January 2008 must re-accomplish that event by midnight, 31 Dec 2009.

1.2.8.2. Monthly look-back. All units will conduct a review at the end of each month to identify JTACs who have not completed at least two terminal attack controls (utilizing live-fly aircraft or an ACC-approved simulator) within the last 90 days, and/or whose currency (minimum of six live-fly controls within the past six months and at least two controls in the last 90 days) will expire within the upcoming month (see paragraph 5.1.). If an individual fails to meet training requirements, see paragraph 4.2.

1.2.9. JTAC control. A JTAC control must include a complete tactical mission scenario IAW Attachment 3, AFI 11-214, *Air Operations Rules and Procedures*. A JTAC control begins with a CAS briefing (the 9-line is the JP 3-09.3 standard) from a JTAC and ends with an actual/simulated weapons release or an abort on a final attack run. No more than two controls can be counted per CAS briefing per target. Re-attacks on a target do not count as controls.

1.2.9.1. CAS control example: A JTAC who controls a 2-ship of A-10s onto a target and issues a “cleared hot” call to each aircraft, earns 2 controls. If the JTAC provides a new briefing for a new target to those same 2 aircraft and issues each aircraft a “cleared hot” call he would earn 2 more controls.

1.2.10. Training Extensions. Unit commanders can grant an individual one 30-day extension in MQT. Air Support Operations Group commanders can grant a second 30-day extension. The first O-6 in the MAJCOM TACP or Combat Control Functional Manager's chain of command is authorized to grant a third 30-day extension or request a waiver.

1.2.11. Training Adjustments. For IQT/MQT, commanders may adjust the training time or remove personnel from initial JTAC training due to PCS, deployments, medical disqualification, emergency leave, administrative action, or failure to progress in the JTAC training program. IQT/MQT requirements cannot be prorated. For CT, unit training managers in coordination with the supervisor and Chief JTAC-I can adjust academic training due dates a maximum of 30 days based on an individual's TDY or emergency leave for 30 cumulative days (3 Unit Training Assemblies [UTA] for ANG) or more. Personnel who are TDY for 30 consecutive days or 3 UTAs or more will continue to accomplish training at temporary locations where JTAC MQT or CT is available. The supervisor or Training Manager (TM), following coordination with the Chief JTAC-I, will document adjustments in the individual's JTAC evaluation folder on an AF Form 623A, *On-the-Job Training Record - Continuation Sheet*.

1.2.12. Unit-specific JTAC training requirements incorporated in the unit's OI will be forwarded to the group TM and Chief JTAC-I for approval by the group commander. Group Chief JTAC-Is will assist subordinate units to ensure all required areas of training and qualifications are addressed. The unit's training OI will, as a minimum, address the following items:

1.2.12.1. Training documentation and assessment responsibilities and procedures.

1.2.12.2. Additional JTAC MQT and CT requirements unique to each unit as appropriate.

1.2.12.3. Work center/duty position Master Task Listings applicable to JTAC operations.

1.2.12.4. Terminal Attack Control mission log management.

1.2.12.5. Risk Assessment Program in accordance with AFPAM 90-902 *Operational Risk Management (ORM) Guidelines and Tools*, or the U.S. Air Force ORM pocket guide.

1.2.13. **CAS Practical Exercise (PE).** A CAS mission PE is a comprehensive training event that includes all areas of mission planning, coordination, and execution but does not involve control of actual aircraft. CAS mission PEs are rehearsals/simulations that allow trainees to demonstrate the skills associated with correct use of tactics, techniques and procedures during various types of CAS control.

1.2.13.1. A CAS mission PE is a tactical scenario that occurs on any given range, or within a defined area of responsibility. Each CAS mission PE could have several different outcomes/training objectives based on the instructor inputs. This will provide instant feedback by the instructor to the trainee in those areas needing improvement. Instructors will use actual mission profiles and mission-related information to familiarize the trainee with what to expect during all phases of mission execution. Instructors will:

1.2.13.1.1. Conduct CAS PEs prior to controlling missions that will include procedures and/or tactics that individuals are not qualified for (e.g., laser, night).

1.2.13.1.2. Use CAS PEs to familiarize individuals with local ranges, aligned Operations Plans, or other training areas as designated by the Chief JTAC-I and unit commander.

1.2.13.2. As a minimum, the CAS PE will consist of mission planning, coordination, execution, briefing, controlling, and debriefing using a unit developed scenario.

1.2.13.3. Document CAS PE control on ACC Form 206, *Individual Mission Gradesheet* (Figure 1.1 and 1.2) when completing a graded terminal attack control mission for a prospective JTAC. File it in the individual's JTAC evaluation folder.

#### 1.2.14. JTAC Safety

1.2.14.1. All personnel will wear approved laser-safe goggles when conducting laser operations.

1.2.14.2. JTACs and personnel collocated with JTACs will wear helmets, body armor and any additional personal protective equipment (PPE) as required by range procedures and OIs when conducting live terminal attack controls.

1.2.14.3. Helmets and body armor must be of the type that will mitigate the effects of fragmentary ordnance associated with aerial delivered weapons.

Figure 1.1. ACC Form 206, *Individual Mission Gradesheet* Page 1

INDIVIDUAL MISSION GRADESHEET <small>(Grading Criteria on Reverse)</small>		RANGE / LOCATION		# OF CONTROLS		DATE	
STUDENT or JTAC (Last, First, MI) / RANK		CLASS NUMBER		# / TYPE AIRCRAFT		INSTRUCTOR (Last, First, MI) / RANK / DSN	
MISSION ELEMENTS	UNKNOWN	DANGEROUS	GRADE 0	GRADE 1	GRADE 2	GRADE 3	GRADE 4
	MISSION STATUS						
	EFFECTIVE						<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	NON-EFFECTIVE/STUDENT NON-PROGRESSION						<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
NON-EFFECTIVE/OTHER						<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
1. MISSION PLANNING / PREPARATION		REMARKS (Continue on Reverse)					
1.1 Range Restrictions		<input type="checkbox"/> CAS PE <input type="checkbox"/> CAS Control					
1.2 Ground Force Staff Coordination		<input type="checkbox"/> IQT Control <input type="checkbox"/> MQT Control <input type="checkbox"/> CMT Control					
1.3 Weather / Hazards		SCENARIO #1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input 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Figure 1.2. ACC Form 206, Individual Mission Gradesheet Page 2

MISSION ELEMENTS	U	D	0	1	2	3	4	REMARKS (Continued)
2.5 Remarks								
2.5.1 LTL / PTL								
2.5.2 Weapons Effects Request								
2.5.3 Threat Location, Activity								
2.5.4 SEAD / FSCMs (GTL, Max Ord, etc)								
2.5.5 Airspace Control Measures								
2.5.6 Restrictions								
2.5.7 Target Description / Talk On								
2.5.8 Target Marks (Artillery, FAC(A), Laser, IR)								
2.5.9 Friendly Positions								
2.5.10 TOT / TTT								
2.5.11 Other Remarks								
2.6 Required Readback (Lines 4, 6, and Restrictions)								
2.7 Terminology / Communication								
3. MISSION EXECUTION								
3.1 Ground Commander Approval								
3.2 SEAD Execution								
3.3 Artillery Call For Fire								
3.4 CAS Aircraft Control								
3.4.1 Airspace Management / Deconfliction								
3.4.2 Type of Control / Final Clearance Instructions								
3.4.3 Restrictions								
3.4.4 Weapons Release Authority								
3.4.5 Recognize / Abort Dangerous Pass								
3.4.6 Weapons Adjustment								
3.5 TOT / TTT								
3.6 Terminology / Communications								
3.7 Battle Damage Assessment								
3.7.1 Post Attack Assessment								
3.7.2 BDA Brief								
4. NIGHT CAS CONSIDERATIONS								
4.1 Night Equipment Operation								
4.2 Brevity Terms								
4.3 Final Clearance Instructions								
5. OTHER								
5.1 Situational Awareness								
5.2 Safety								
GRADING CRITERIA								
UNKNOWN - Performance was not observed or the element was not performed. DANGEROUS - Performance was unsafe (one element marked "Dangerous" will require an overall grade of "Zero"). GRADE 0 - Performance indicates a lack of ability or knowledge. GRADE 1 - Performance is safe, but indicates limited proficiency. Makes errors of omission or commission. GRADE 2 - Performance is essentially correct. Recognizes and corrects errors. GRADE 3 - Performance is correct, efficient, skillful and without hesitation. GRADE 4 - Performance reflects an unusually high degree of ability.  NOTES: An overall grade of 2 or higher is required for an effective mission. A grade of 0 on any Mission Element in <b>bold</b> will result in an overall grade of 0 (non-effective). A grade of 1 on three or more Mission Elements in <b>bold</b> will result in an overall grade of 1 (non-effective). A grade of 1 on five or more Mission Elements will result in an overall grade of 1 (non-effective).								

ACC Form 206, JAN 2007 (Reverse) (Computer generated)

### 1.3. Responsibilities. Specific responsibilities are listed in Table 1.2.

Table 1.2. Responsibilities.

R U L E	RESPONSIBILITY	AF/A30-AY	MAJCOM	Group Commander	Group Chief JTAC-I	Unit Commander	Unit Chief JTAC-I	Individual JTAC	57 OG/6 CTS/JFCOE	Det 1, 548 CTS & 12 CTS
1	Establish policy and provide guidance for the execution of the JTAC training program.	X								
2	Resolve training issues that arise between using MAJCOMs.	X								

3	Review and process all change requests to this instruction.	X							
4	Resolve major training issues that arise between units within their purview.		X						
5	Forward all requested MAJCOM supplements to HQ USAF/ A3O-AY for coordination. Inform all MAJCOM Offices of Primary Responsibility (OPRs) of approved supplements to this AFI.		X						
6	Assist subordinate units in obtaining formal school quotas and training resources to support JTAC training.		X						
7	Execute group-level responsibilities over squadrons that lack group oversight or assign group-level responsibility directly to the squadron.		X						
8	Approve all automated training tracking products.		X						
9	Ensure compliance with this instruction by their subordinate units. Provide staff support and assist those units in implementing and managing the training program to meet DOC statement readiness requirements.			X				X	
10	If required, forward recommended supplements to this instruction and any supporting documents to the parent MAJCOM for review. The Group and MAJCOM will review approved supplements annually.			X				X	
<b>R U L E</b>	<b>RESPONSIBILITY</b>	<b>AF/A3O-AY</b>	<b>MAJCOM</b>	<b>Group Commander</b>	<b>Group Chief JTAC-I</b>	<b>Unit Commander</b>	<b>Unit Chief JTAC-I</b>	<b>Individual JTAC</b>	<b>57 OG/6 CTS/JFCOE</b>
11	Certify and designate in writing, a Chief JTAC-I responsible for the oversight of unit/subordinate unit's JTAC training programs. Certification will be documented in the individual's JTAC evaluation folder.			X		X		X	X
12	Award initial JTAC CMR certification to unit personnel upon completion of JTAC MQT.			X		X		X	X
*13	Award SEI 914, 279 and 280 as required. <b>Note:</b> SEIs 279 and 280 will be additive to the members list			X		X			X

	of qualified SEIs and not replace SEI 914.								
14	Approve the unit's JTAC training program OI.			X		X			X X
15	Establish and maintain the unit's JTAC training program IAW AFI 36-2201, Volume 3.			X		X			X X
16	Coordinate, direct, and control the unit's training events and processes to include commander/staff reviews of automated data products and operational reports assessing unit/ individual JTAC training status.			X		X			X X
17	Ensure adequate continuity and supervision of individual training needs and experience levels for assigned/attached JTACs.			X		X			X X
18	Identify unit JTAC training deficiencies to the Group, and implement corrective actions.					X			X
19	Approve individuals for entry into JTAC qualification training.			X		X			X X
20	In concert with the Operations Training Manager, schedule/ conduct assistance visits to subordinate units at least annually to ensure JTAC training requirements of this AFI are implemented and followed.				X				X
21	Ensure JTACs are registered and use TACTICS (see Chapter 8), (non-AFSOC units only)				X		X		X X
22	Maintain JTAC lesson plans and develop additional lesson plans to support any unique unit training needs.				X		X		X X
<b>R U L E</b>	<b>RESPONSIBILITY</b>	<b>AF/A30-AY</b>	<b>MAJCOM</b>	<b>Group Commander</b>	<b>Group Chief JTAC-I</b>	<b>Unit Commander</b>	<b>Unit Chief JTAC-I</b>	<b>Individual JTAC</b>	<b>57 OG/6 CTS/JFCOE</b> <b>Det 1, 548 CTS &amp; 12 CTS</b>
23	Properly record all JTAC training, listed in Table 2.1. and Table 5.1., as applicable. If AF Information Management Tool (IMT) 1098, Special Task Certification and Recurring Training, is not filed in Part V of the JTAC's evaluation folder, a Memorandum for Record (MFR) will be inserted stating that training completion information is available on TACTICS. AFSOC units use AF IMT 1098 and print an updated copy every six months and prior to the individual JTAC's deployment or PCS.				X		X	X	X

*24	Document any unit-MQT or MAJCOM/NGB required training for JTACs on AF IMT 797, <i>Job Qualification Standard Continuation/Command</i> (JQS) or unit approved automated product. The AF IMT 797 will be placed in the individual's JTAC evaluation folder. See <a href="#">Figure 2.1.</a> and <a href="#">Figure 2.2.</a> for an example.				X		X		X	X
25	Maintain a copy of JTAC training records for six months on all JTACs who PCS/PCA, separate, or retire. Destroy the records after six months.				X		X		X	X
26	Ensure a current JTAC Letter of Qualifications is maintained for unit JTACs. Format letter using AF IMT 3130, <i>General Purpose</i> (see <a href="#">Figure 1.3.</a> ), or a MAJCOM approved automated product.				X		X		X	X
27	Review all training records of newly assigned JTAC personnel.				X		X		X	X
*28	Coordinate with the unit's TM and ensure that provisions for selecting and training the JTAC-Is instructional techniques (reference <a href="#">Chapter 7</a> ) are incorporated into the units overall training program OI.				X		X		X	X
<b>R U L E</b>	<b>RESPONSIBILITY</b>	<b>AF/A30-AY</b>	<b>MAJCOM</b>	<b>Group Commander</b>	<b>Group Chief JTAC-I</b>	<b>Unit Commander</b>	<b>Unit Chief JTAC-I</b>	<b>Individual JTAC</b>	<b>57 OG/6 CTS/JFCOE</b>	<b>Det 1, 548 CTS &amp; 12 CTS</b>
*29	Develop an operational risk measurement (ORM) standard for terminal attack control missions using Air Force Pamphlet 90-902 or the U.S. Air Force Operational Risk Management pocket guide.				X		X		X	X
*30	Ensure that Type 5 information for those individuals attending the JTAC Qualification Course is forwarded to the appropriate MAJCOM/NGB no earlier than 60 days and no later than 15 days prior to class start date.				X					
*31	Develop and incorporate unit-specific JTAC training program management procedures into the unit's operations training program OI governed by this AFI, AFI 13-113V1 and AFI 13-114V1 (when published) or by a separate OI dedicated to JTAC training.				X		X		X	X

*32	Maintain JTAC CMR status IAW this AFI.				X		X	X	X	X
*33	Maintain JTAC-I qualifications IAW <a href="#">Chapter 7</a> of this AFI.				X		X		X	X
*34	Develop scenarios for CAS practical exercises.				X		X		X	X
*35	Hand-carry their individual JTAC evaluation folder, in sealed tamper-resistant package, during Permanent Change of Station/Assignment (PCS/PCA) moves to assist the gaining unit in assessing qualifications and training requirements.							X		
*36	When tasked to perform controller duties at temporary duty locations/contingencies for more than 30 days, hand carry a copy of their JTAC evaluation folder. The home unit will make a copy of the individual's JTAC evaluation folder prior to their departure.							X		
*37	Register and use TACTICS. (Non-AFSOC units only)							X		
*38	Provide group oversight of Detachment 1, 548 CTS, Joint Readiness Training Center, Fort Polk LA, and 12 CTS, National Training Center (NTC) Fort Irwin CA.								X	

**1.4. Waivers.** The waiver authority for provisions in **Chapter 2** and **Chapter 3** of this AFI is the MAJCOM/A3 (2-letter). Waiver authority for other chapters in this AFI is the MAJCOM/A3 (3-letter). Waivers to this instruction are valid for one year from approval date, unless specified otherwise. MAJCOMs will forward a copy of all approved waivers to AF/A3O-AYO.

**1.5. Deployments.** Individuals deploying to fill a JTAC requirement must deploy CMR for the duty position they are tasked to support for that deployment (i.e. JTAC, ALO).

1.5.1. CMR JTACs who are deployed to a combatant command in support of contingency operations do not have to maintain currency and CT requirements for the duration of the deployment. All JTACs who do not maintain currency and CT requirements are considered Non-CMR upon completion of the deployment, and must regain CMR status upon return to home station IAW [Chapter 4](#).

1.5.2. Units are encouraged to take advantage of any training opportunities that become available. Document all training and JTAC missions, to include combat controls, completed during the deployment. Training to regain CMR status will begin on the individual's first duty day after the authorized reconstitution period.

**1.6. Supplements.** MAJCOMs and/or subordinate groups may supplement this instruction in order to provide specific guidance to their aligned units. The parent MAJCOM Office of Primary Responsibility (OPR) must approve all group-level supplements. AF/A3O-AY will coordinate prior to publication on all MAJCOM supplements. MAJCOM OPRs will forward all approved supplements to the other MAJCOMs within 30 days of publication. The NGB will provide a copy of any approved supplements to their gaining MAJCOM.

**1.8. Individual JTAC Transfers.** Individual JTACs who execute a PCS/PCA will hand carry their JTAC evaluation folder to the gaining organization in a sealed tamper-resistant package. The losing unit must mail any JTAC training records that are not included in the folder at the time of transfer to the gaining organization with clear identification of the individual concerned. The losing unit Chief JTAC-I will keep an archive copy (hard copy or electronic copy) of the JTAC evaluation folder (with signatures and dates) for six months after the individual departs the unit for PCS, PCA, separation, or retirement. JTACs that are retiring/separating will be provided their original JTAC folder.

1.8.2. In the case of transferring to an assignment not requiring JTAC duties, individual JTACs must maintain their training records until they return to JTAC duties. Upon return to JTAC duties, the records must be presented to the gaining unit.

**Figure 1.3. Sample AF IMT 3130**

[illegible]

Figure 1.4. Sample Joint Terminal Attack Controller (JTAC) Mission Log

JOINT TERMINAL ATTACK CONTROL (JTAC) MISSION LOG FOR JOHN Q. PUBLIC								
DATE	RANGE NAME AND LOCATION	NUMBER AND A/C TYPE	TYPE OF ORDNANCE	NUMBER OF CONTROLS	TYPE OF CONTROL/MARK/ DAY/NIGHT/OTHER (Specify)*	CONTROLLER'S SIGNATURE	SUPERVISOR'S INITIALS	REMARKS
02 Feb 2001	Coleman, Ft Bragg NC	2 x A-10s	30MM MK-82	1	1/IR/N			
28 Feb 2001	Manchester, Ft Bragg NC	2 x F-16s	Dry	4	2/NA/D			
10 Mar 2001	Shoal Creek, Ft Hood TX	2 x A-10s	BDU-33	2	1/LD/D			
22 Mar 2001	Coleman, Ft Bragg NC	2 x A-10s	AGM-65B	1	1/LD/N			

\*This column should be completed in the following order: Type of Control/Type of Mark/Day or Night Mission. Controls: Type 1 Control = 1, Type 2 Control = 2, Type 3 Control = 3; Marks: Laser Designation = LD, IR = IR, White Phosphorous = WP, Red Phosphorous = RP, Illume = IL, Indirect Fire or Artillery = IF, No Mark = NA, Direct Fire = DF, Talk On = TO; Day = D and Night = N; Other = O (Specify Service, USSOCOM, or Coalition training requirement). Example: a Type 1 CAS mission using illume on deck during the daytime would be annotated as 1/IL/D.

FIGURE 1.5. DELETED

## Chapter 2

### JTAC INITIAL QUALIFICATION TRAINING

**2.1. General.** JTAC IQT is the process to train a JTAC in basic controller duties without regard to the unit's mission. IQT is attendance at a Joint Forces Command (JFCOM) accredited, formal JTAC training school (schoolhouse). USAF JTAC schoolhouses will, upon student arrival and prior to beginning classes, verify that students have met all prerequisites IAW this AFI. IQT is complete after the prospective JTAC successfully completes a USJFCOM-accredited training course. Upon completion of JTAC IQT, the JTAC begins MQT (see Chapter 3). JTAC-Is will document all controls in JTAC IQT using an ACC Form 206.

2.1.1. Prerequisites for entry into JTAC IQT. The following requirements must be met/accomplished prior to an individual attending a formal JTAC qualification course:

2.1.1.1. Prospective JTACs must have 1 year in a position with operational experience in Air Force Specialty Code (AFSC) 1C4X1, 1C2X1, 13DXB or be an aircrew member with one year of operational flying experience. **Note:** Non-USAF individuals must possess the operational or mission ready experience required by the JTAC MOA.

2.1.1.2. Enlisted personnel must possess a 5-skill level in AFSC 1C2X1 or 1C4X1 (USAF only).

2.1.1.3. All items listed as prerequisites in Table 2.1. will be accomplished using the TACTICS modules (for non-AFSOC units) or unit approved training plan (for AFSOC units). Successful completion of prerequisite training requires passing of both the academic and task evaluation portions of the module.

2.1.1.4. Individuals must read and be able to identify relationships of basic facts, and state general principles about the subject matter in the documents below. See **References** section in Attachment 1 for publication webpage addresses:

2.1.1.4.1. JP 3-09.3, *JTTP for CAS*.

2.1.1.4.2. AFTTP(I) 3-2.6, JFIRE, Multi-service Procedures for the Joint Application of Firepower.

2.1.1.4.3. AFI 11-214, *Air Operations Rules and Procedures*.

2.1.1.4.4. AFTTP 3-1, *Tactical Employment – TACS* (classified) (U.S. requirement only).

2.1.1.4.5. AFTTP 3-3, Combat Fundamentals, Joint Terminal Attack Controller (JTAC) (when published)

2.1.1.4.6. JP 3-09.1 JTTP for LASER Designation Operations

2.1.2. Following completion of all prerequisites, commanders will annotate approved entry into IQT utilizing AF Form 797 (Figure 2.2). See paragraph 1.2.6. for individuals authorized to perform JTAC duties. Failure to bring this required documentation will result in disenrollment from the course following coordination with the TACP or Combat Control Functional Manager at the MAJCOM responsible for that JTAC Qualification Course (JTACQC).

2.1.3. A minimum of 12 successful graded controls must be completed between entry into IQT and the completion of MQT (minimum of 8 in IQT) and will include the following (see paragraph 2.2.3. for required simulation controls):



2.1.3.1. 10 controls must be fixed-wing controls (includes up to 2 bomber controls and 1 Unmanned Aerial System (UAS) control but no AC-130 controls)

2.1.3.2. Minimum of 4 controls must expend live or training ordnance.

2.1.3.3. Minimum of 1 control must be at night (The use of a ground based night vision device and compatible target marking device are highly desirable).

2.1.3.4. Minimum of 1 control must employ a ground based laser target designator.

2.1.3.5. All controls will be Type 1 or 2 with a minimum of one Type 2 and a maximum of six Type 2 controls.

**Note:** One or more of the above requirements may be completed in one control (i.e. live and laser) however, this combination only counts for 1 of the 12 total controls required. A JTAC's first 90 day lookback will be 90 days following his initial certification (see paragraph 5.1.).

2.1.4. USAF JTACs attending a USAF JTAC Schoolhouse (i.e. 6 CTS, JFCOE) will have their JTAC evaluation folder created by the Schoolhouse. USAF JTACs attending other Service/Country JTAC School, units will need to coordinate with that school and may need to create a folder prior to school attendance.

2.1.5. JTAC Schoolhouses will provide a written report listing all training that was accomplished and, as necessary, a deficiency letter listing any required training that was not accomplished to include the reason why the training was not accomplished. Training deficiency letters will contain the standard used to measure successful completion of each task and associated references.

## 2.2. JTAC IQT Training.

2.2.1. Prospective JTACs must successfully complete all IQT requirements listed in Table 2.1. and this chapter. Any IQT requirements not completed during JTACQC must be accomplished within 45 days (90 for ANG) of the course completion date.

2.2.1.1. As circumstances permit, tasks listed as MQT requirements in Table 2.1. may be completed at the formal JTAC schoolhouse. These tasks do not have to be reaccomplished during the MQT phase of training.

2.2.2. Each academic training task will require successful completion of an examination (80 percent minimum to pass). Use testing to validate qualification to the maximum extent possible throughout the training program.

2.2.3. Successfully complete a minimum of four graded terminal attack controls in the JTAC Training and Rehearsal System (Indirect-Forward Air Controller Trainer [I-FACT] or ACC-approved simulator). If an approved simulator is not available, the use of live-fly aircraft or CAS Practical Exercises is authorized.

2.2.4. File all training material for the prospective JTAC in the individual's JTAC evaluation folder, to include grade sheets completed during the formal training course(s).

2.2.5. Individuals who fail to successfully complete a JFCOM approved JTACQC due to academic failure or non-progression, two times, will be considered for removal from the career field. Unit commanders must review the requirements of the Air Force Enlisted Classification Directory and take the appropriate action.

Table 2.1. **Joint Terminal Attack Controller IQT/MQT Program.**

<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
<b>01. CAS Planning</b>		
01.1. Advise ground commander on CAS assets in support of ground scheme of maneuver	Given a tactical scenario, operations order, and while participating in the Military Decision Making Process (MDMP)/Marine Corps Planning Process (MCPPE)/Coalition Planning Process (CPP) as a member of a warfighting staff, advise ground commander on CAS assets in support of the ground scheme of maneuver	<b>IQT</b>
01.1.1. Advise ground commander on Fixed-Wing (FW)/ Rotary-Wing (RW) CAS capabilities, limitations and employment.	Demonstrate knowledge of the capabilities, limitations, and employment of FW/RW CAS during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.1.2. Advise ground commander on FW/RW FAC (A) capabilities, limitations and employment.	Demonstrate knowledge of the capabilities, limitations, and employment of FW/RW FAC (A), during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.1.3. Advise ground commander on Unmanned Aerial Systems (UAS) capabilities/limitations/employment.	Demonstrate knowledge of CAS weapons capabilities, limitations, and minimum risk tables during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.1.4. Advise ground commander on aviation weapon capabilities/limitations/employment.	Demonstrate knowledge of CAS weapon's capabilities, limitations, and employment during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.1.5. Advise ground commander on effects of weather, terrain, and threat on CAS capabilities.	Demonstrate knowledge of weather, terrain and threats when employing CAS assets during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.1.6. Advise ground commander on the use and timely submission of joint tactical air strike requests (JTAR).	Demonstrate knowledge of the Air Tasking Order (ATO) planning cycle and its effects on JTAR submission during the conduct of a written evaluation and or practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
01.2. Advise ground commander on types of Terminal Attack Control.	Demonstrate knowledge of how tactical situation, aircrew, aircraft, and weapons capabilities/limitations determines appropriate types of CAS during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.3. Advise ground commander on CAS specific rules of engagement (ROE).	Demonstrate knowledge of CAS weapons capabilities, limitations, and minimum risk tables during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>

01.4. Advise ground commander on integration of CAS with indirect fires.	Demonstrate knowledge of the integration of indirect fires (surface to surface) with CAS during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.5. Interpret fire support coordination measures and their impact on CAS mission planning.	Given a tactical scenario, operations order, and while participating in the MDMP/MCPP/PPP as a member of a warfighting staff, assess the impact of FSCMs on CAS operations in support of the ground commander's concept of operations.	<b>IQT</b>
01.6. Interpret airspace command and control (Joint and Component), and their impact on CAS mission planning.	Given a tactical scenario, operations order, assess the impact of airspace command and control requirements on CAS operations in support of the ground commander's concept of operations during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.6.1. Advise ground commander on the various components of Theater Air Ground System (TAGS), and their impact on CAS mission planning.	Demonstrate knowledge of Theater Air Control System (TACS)/Army Air-Ground System (AAGS), Marine Corps Air Command and Control System (MACCS), Navy Tactical Air Control System (NTACS), and Special Operations Command and Control during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.6.2. Advise ground commander on Airspace Control Order (ACO), Airspace Control Measures (ACM), Air Tasking Order (ATO), Special Instructions (Spins), and their impact on CAS mission planning.	Demonstrate knowledge of ACO, ACM, ATO, and Spins during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.7. Apply the products of the intelligence cycle to CAS mission planning.	Given a tactical scenario, operations order, apply the products of the intelligence cycle to support CAS mission planning in support of the ground commander's concept of operations through its application in practical exercises, simulations, and using appropriate reference material when required.	<b>IQT</b>
01.8. Apply the products of the targeting process to CAS mission planning.	Demonstrate knowledge of the targeting process during the conduct of a written evaluation and or through its application in practical exercises, using appropriate reference material when required.	<b>IQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
01.9. Plan CAS missions with precision and non-precision weapons, in support of the ground scheme of maneuver.	Demonstrate knowledge of precision and non-precision weapons employment during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.9.1. Plan laser guided weapon system deliveries.	Demonstrate knowledge of laser guided weapons employment during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>

01.9.2. Plan coordinate-dependant weapons deliveries.	Demonstrate knowledge of coordinate-dependant weapons employment during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.9.3. Plan sensor-guided weapons deliveries.	Demonstrate knowledge of sensor-guided weapons employment during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.9.4. Plan non-precision weapons deliveries.	Demonstrate knowledge of non-precision weapons employment during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.10. Plan engagement with appropriate weapon in order to achieve desired effects, proportional response, and minimize collateral damage.	Demonstrate knowledge of aviation ordnance capabilities and effects during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.11. Plan day CAS missions, in support of the ground scheme of maneuver.	Demonstrate knowledge of day, CAS planning factors during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.11.1. Plan day FW CAS missions.	Demonstrate knowledge of day, FW CAS planning factors during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.11.2. Plan day RW CAS missions.	Demonstrate knowledge of day, RW CAS planning factors during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	<b>IQT</b>
01.11.3. Plan day UAS missions in support of CAS.	Demonstrate knowledge of day, UAS planning factors ISO CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.12. Plan night CAS missions, in support of the ground scheme of maneuver.	Demonstrate knowledge of night, CAS planning factors during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
01.12.1. Plan night FW CAS missions.	Demonstrate knowledge of night, FW CAS planning factors during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.12.2. Plan night RW CAS missions.	Demonstrate knowledge of night, RW CAS planning factors during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.12.3. Plan night UAS missions in support of CAS.	Demonstrate knowledge of night, UAS planning factors in support of CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	<b>IQT</b>
01.12.4. Plan	Demonstrate knowledge of illumination, in support of CAS during the	<b>IQT</b>

Illumination in support of night CAS missions.	conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	
01.12.4.1. Plan ground-delivered Illumination.	Demonstrate knowledge of ground-delivered illumination, in support of CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.12.4.2. Plan aviation-delivered Illumination.	Demonstrate knowledge of aviation-delivered illumination, in support of CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.13. Incorporate adverse weather CAS considerations.	Demonstrate knowledge of weather and its effects on CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.14. Incorporate urban CAS considerations.	Demonstrate knowledge of urban CAS planning factors during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.15. Plan AC-130 fire missions in support of the ground scheme of maneuver.	Demonstrate knowledge of AC-130 fire mission during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.16. Plan integrated attack by multiple fire support assets to support CAS.	Demonstrate the ability to effectively plan attacks by multiple fire support assets to support CAS with target marking, Suppression of Enemy Air Defenses (SEAD), and illumination during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	IQT
01.16.1. Plan target marking for CAS assets.	Demonstrate the ability to effectively plan target marking for CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.16.1.1. Plan visual target marking for CAS assets.	Demonstrate the ability to effectively plan visual target marking for CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.16.1.2. Plan sensor target marking for CAS assets.	Demonstrate the ability to effectively plan sensor (e.g. Targeting Pod downlink, UAS) target marking for CAS during the conduct of a written evaluation and or through its application in practical exercises and simulations, using appropriate reference material when required.	IQT
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
01.16.2. Plan Suppression Enemy Air Defenses (SEAD) for CAS attack.	Demonstrate the ability to effectively plan SEAD for CAS during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.17. Plan terminal attack control procedures in support of CAS attack.	Demonstrate knowledge of terminal attack control procedures in support of CAS planning during the conduct of a written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.18. Plan target location procedures in support of attack.	Demonstrate knowledge of target location procedures in support of CAS planning during the conduct of written evaluation and through its application in practical exercises and or simulations, using appropriate reference material when required.	IQT
01.19. Request CAS via JTAR.	Demonstrate knowledge of the JTAR during the conduct of a written evaluation and demonstrate the ability to correctly complete a JTAR	IQT

	form and route in accordance with JP 3-09.3 during practical exercises and or simulations, using appropriate reference material when required.	
<b>02 - CAS Preparation</b>		
02.1. Operate organic JTAC equipment.	Demonstrate the ability to operate organic equipment to request and control CAS during live and or simulated training events, using appropriate reference material when required.	<b>P</b>
02.1.1. Operate organic JTAC communications equipment.	Demonstrate the ability to operate organic communications equipment in order to establish communications on designated nets to request and control CAS during live and or simulated training events, using appropriate reference material when required.	<b>P</b>
02.1.2. Operate organic JTAC target marking equipment.	Demonstrate the ability to operate organic target marking equipment in support of CAS during live and or simulated training events, using appropriate reference material when required.	<b>P</b>
02.1.3. Operate organic JTAC target location equipment.	Demonstrate the ability to operate organic target location equipment in support of CAS during live and or simulated training events, using appropriate reference material when required.	<b>P</b>
02.2. Apply the products of Operational planning in support of CAS execution.	Demonstrate the ability to apply the products of operational planning in support of CAS during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
02.2.1. Apply the products of the intelligence cycle in support of CAS execution.	Demonstrate the ability to apply the products of the intelligence cycle during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
02.2.2. Apply the products of the fire support plan in support of CAS execution.	Demonstrate the ability to apply the products of the fire support plan (e.g., FSCMs) during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
02.2.3. Apply the products of the Airspace Control Order in support of CAS execution.	Demonstrate the ability to apply the products of the ACO (e.g., ACMs) during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
02.2.4. Apply the products of communications planning in support of CAS execution.	Demonstrate the ability to apply the products of communication planning (e.g., Tactical Air Direction (TAD), Joint Air Request Net (JARN), Tactical Air Request (TAR)/Helicopter Request (HR), TACP Local (L)) during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
02.2.5. Apply the products of the ATO in support of CAS execution.	Demonstrate the ability to apply the products of the ATO (e.g., aircraft, time on station, SPINS) during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
<b>03 - CAS Execution</b>		
03.1. Target detection	Demonstrate the ability to detect targets based on commander's CAS target nominations during live and or simulated day training events.	<b>IQT</b>
<b>03.1.1. Target Acquisition</b>		
03.1.1.1. Execute target acquisition via aided and unaided day vision.	Demonstrate the ability to acquire targets aided and unaided during live and or simulated day training events.	<b>P</b>
03.1.1.2. Execute target acquisition via	Demonstrate the ability to acquire targets aided and unaided during live and or simulated night training events.	<b>P</b>

aided and unaided night vision.		
03.1.1.3. Execute target acquisition via remote observer.	Demonstrate the ability to acquire targets via remote observer during live and or simulated training events.	<b>IQT</b>
03.1.1.4. Execute target acquisition via remote real-time sensor information.	Demonstrate the ability to acquire targets via remote real-time sensor (e.g. Aircraft targeting pod w/ video down link, ROVER) during live and or simulated training events.	<b>MQT</b>
<b>03.1.2 Target Location</b>		
03.1.2.1. Determine target location via map plot.	Demonstrate the ability to determine target location via map plot during live and or simulated training events.	<b>P/IQT</b>
03.1.2.2. Determine target location via coupled GPS/LRF system.	Demonstrate the ability to determine target location via coupled GPS/LRF during live and or simulated training events.	<b>P/IQT</b>
03.1.2.3. Determine target location via tactical targeting system (e.g., DPSS, PSS-SOF).	Demonstrate the ability to determine target location via tactical targeting system during live or simulated training events.	<b>IQT</b>
03.2. Match target location accuracy / format to desired weapons system.	Demonstrate the ability to determine accuracy of target location and proper coordinate format to desired weapons system during live and or simulated training events.	<b>IQT</b>
<b>03.3. Coordinate CAS missions.</b>		
03.3.1. Integrate CAS missions with ground scheme of maneuver.	Demonstrate the ability to integrate CAS missions with ground scheme of maneuver during live and or simulated training events.	<b>IQT</b>
03.3.2. Integrate CAS missions with surface-based fires.	Demonstrate the ability to integrate CAS missions with surface-based fires during live and or simulated training events.	<b>IQT</b>
03.3.3. Integrate CAS missions with existing fire support coordination measures.	Demonstrate the ability to integrate CAS missions with existing fire support coordination measures during live and or simulated training events.	<b>IQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
03.3.4. Integrate CAS missions with existing airspace coordination measures.	Demonstrate the ability to integrate CAS missions with existing airspace coordination measures during live and or simulated training events.	<b>IQT</b>
<b>03.4. Coordinate CAS Target engagement.</b>		
03.4.1. Receive aircraft check-in brief.	Demonstrate the ability to receive aircraft check-in brief during live and or simulated training events.	<b>IQT</b>
03.4.2. Provide situation update to CAS aircraft.	Demonstrate the ability to provide situation update to CAS aircraft during live and or simulated training events.	<b>IQT</b>
03.4.3. Provide CAS Brief.	Demonstrate the ability to provide CAS brief during live and or simulated training events.	<b>IQT</b>
03.4.4 Provide weaponeering guidance to achieve desired	Demonstrate the ability to provide weaponeering guidance to achieve desired effects during live and or simulated training events.	<b>IQT</b>

effects.		
03.5. Execute de-confliction of aviation assets.		
03.5.1. Execute procedural control of aircraft to provide safe separation of aircraft.	Demonstrate the ability to effectively de-conflict aircraft from aircraft during live and or simulated training events.	IQT
03.5.2. Execute procedural control of aircraft to provide safe separation from fires.	Demonstrate the ability to effectively de-conflict aircraft from fires during live and or simulated training events.	IQT
03.6. Execute target marking for CAS assets.		
03.6.1. Execute visual target marking for CAS assets.	Demonstrate the ability to effectively target mark via visual means during live and or simulated training events, using appropriate reference material when required.	IQT
03.6.2. Execute sensor target marking for CAS assets.	Demonstrate the ability to effectively target mark via sensor during live and or simulated training events, using appropriate reference material when required.	IQT
03.7. Integrate SEAD during the execution of CAS missions.	Demonstrate the ability to effectively integrate SEAD with CAS during live and or simulated training events, using appropriate reference material when required.	IQT
03.8. Execute appropriate terminal attack control procedures.		
03.8.1. Execute Type 1 terminal attack control procedures.	Perform Type 1 terminal attack control of CAS aircraft during live training events, using appropriate reference material when required.	IQT
03.8.2. Execute Type 2 terminal attack control procedures.	Perform Type 2 terminal attack control of CAS aircraft during live training events, using appropriate reference material when required.	IQT
03.8.3. Execute Type 3 terminal attack control procedures.	Perform Type 3 terminal attack control of CAS aircraft during live and or simulated training events, using appropriate reference material when required.	IQT
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
03.9. Control precision weapons CAS missions, in support of the ground scheme of maneuver.		
03.9.1. Control laser guided weapon system deliveries.	Perform a laser guided weapon control during live and or simulated training events, using appropriate reference material when required.	IQT
03.9.1.1. Control laser guided weapon system deliveries.	Perform a laser guided weapon control using ground based laser target designator during live and or simulated training events practicing terminal guidance operations, using appropriate reference material when required.	IQT
03.9.2. Control coordinate-dependant weapons deliveries.	Perform a coordinate-dependent weapon control during live and or simulated training events, using appropriate reference material when required.	IQT
03.9.3. Control sensor-guided weapons	Perform a sensor-guided weapon control (e.g. Targeting Pod downlink, UAS) during live and or simulated training events, using appropriate	IQT



deliveries.	reference material when required.	
03.10. Control non-precision weapons CAS missions, in support of the ground scheme of maneuver.	Perform a non-precision weapon control during live training events, using appropriate reference material when required.	<b>IQT</b>
03.11. Control day CAS missions, in support of the ground scheme of maneuver.		
03.11.1. Control day FW CAS missions.	Perform a day fixed-wing control during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.11.2. Control day RW CAS missions.	Perform a day rotary-wing control during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.11.3. Control day UAS missions.	Perform a day UAS control during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
03.12. Control night CAS missions, in support of the ground scheme of maneuver.		
03.12.1. Control night FW CAS missions.	Perform a night fixed-wing control during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
03.12.2. Control night RW CAS missions.	Perform a night rotary-wing control during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
03.12.3. Control night UAS missions.	Perform a night UAS control during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
03.12.4. Integrate Illumination in support of night CAS missions.		
03.12.4.1. Integrate ground-delivered Illumination.	Demonstrate the ability to effectively integrate ground-delivered illumination in support of CAS during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
03.12.4.2. Control aviation-delivered Illumination.	Demonstrate the ability to effectively integrate aviation-delivered illumination in support of CAS during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
<b>TASK</b>	<b>CONDITION</b>	<b>TRAINING PHASE</b>
03.13. Control adverse weather CAS missions, in support of the ground scheme of maneuver.	Perform an adverse weather control during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.14. Control urban CAS missions, in support of the ground scheme of maneuver.	Perform an Urban control during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.15. Control AC-130 fire missions in support of the ground scheme of maneuver.	Perform an AC-130 control during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.16. Employ service digital CAS systems.	Demonstrate the ability to control CAS missions using service digital CAS systems during live and or simulated training events, using appropriate reference material when required.	<b>MQT</b>
<b>03.17. Attack Assessment.</b>		
03.17.1. Conduct Battle Damage Assessment	Demonstrate the ability to provide input into the BDA and follow-on entry into the targeting process during live and or simulated training	<b>IQT</b>

(BDA).	events, using appropriate reference material when required.	
03.17.2. Complete a mission report (MISREP) and re-attack recommendation for BDA.	Demonstrate the ability to complete a mission report (MISREP) (i.e. Battle Damage Assessment) and re-attack recommendation during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>
03.17.3. Route MISREP in accordance with CAS JTTP.	Demonstrate the ability to route MISREP in accordance with CAS JTTP during live and or simulated training events, using appropriate reference material when required.	<b>IQT</b>

## NOTES:

1. "P" = prerequisite training that must be accomplished prior to attendance at a formal JTAC qualification course, also see paragraph **2.1.1.4**.
2. Standards for successful completion of each of the above IQT tasks will be contained in the training syllabus maintained by the JTAC schoolhouse and be IAW requirements of the JTAC MOA when published. JTAC schoolhouses will provide JTAC training syllabi to all units required to conduct IQT training due to training deficiencies that occur at the schoolhouse.

Figure 2.1. Sample AF IMT 797 Part 1

JOB QUALIFICATION STANDARD CONTINUATION/COMMAND JQS							
CRITICAL TASK	TASK NUMBER	TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	CERTIFICATION				
			START DATE	COMPLETION DATE	TRAINEE'S INITIALS	TRAINER'S INITIALS	CERTIFIER'S INITIALS (IF REQUIRED)
<input type="checkbox"/>		JTAC upgrade procedures TR: AFI 13-112 Volume 1					
<input type="checkbox"/>	1.	Have 1 year in a position with operational experience in Air Force Specialty Code (AFSC) 1C4X1, 1C2X1 or 13DXB or be an aircrew member with one year of operational flying experience.					
<input type="checkbox"/>	2.	Enlisted Personnel must possess a 5-skill level in AFSC 1C2X1 or 1C4X1					
<input type="checkbox"/>	3.	Be qualified to perform JTAC duties IAW Table 1.1., AFI 13-112 Volume 1					
<input type="checkbox"/>	4.	Successfully accomplish all items listed as prerequisites in Table 2.1. using the TACTICS modules (for non-AFSOC units) or unit approved training plan (for AFSOC units)					
<input type="checkbox"/>	5.	Individuals must read and be able to identify relationships of basic facts, and state general principles about the subject matter in the documents below.					
<input type="checkbox"/>	5.1.	JP 3-09.3, JTTP for CAS					
<input type="checkbox"/>	5.2.	AFTTP(I) 3-2.6, JFIRE, Multi-service Procedures for the Joint Application of Firepower					
<input type="checkbox"/>	5.3.	AFI 11-214, Air Operations Rules and Procedures					
<input type="checkbox"/>	5.4.	AFTTP 3-1, Tactical Employment – TACS (classified)					
<input type="checkbox"/>	5.5.	AFTTP 3-3, Combat Fundamentals, Joint Terminal Attack Controller (JTAC) (when published)					
<input type="checkbox"/>	5.6.	JP 3-09.1 JTTP for LASER Designation Operations					
TRAINEE NAME				CFETP/JQS NUMBER		PAGE NO.	

Figure 2.2. Sample AF IMT 797 Part 2

JOB QUALIFICATION STANDARD CONTINUATION/COMMAND JQS							
CRITICAL TASK	TASK NUMBER	TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	CERTIFICATION				
			START DATE	COMPLETION DATE	TRAINEE'S INITIALS	TRAINER'S INITIALS	CERTIFIER'S INITIALS (IF REQUIRED)
<input type="checkbox"/>	6.	Commander approval for entry into JTAC IQT IAW AFI 13-112 Volume 1 Signature: _____					
<input type="checkbox"/>	7.	Complete JTAC IQT					
<input type="checkbox"/>	8.	Successfully complete a minimum of four graded terminal attack controls in the Indirect-Forward Air Controller Trainer [I-FACT] or MAJCOM-approved simulator, documented on an ACC Form 206 IAW paragraph 3.2.2. in AFI 13-112 Volume 1					
<input type="checkbox"/>	9.	Complete the number and type of successful graded terminal attack controls not accomplished in IQT IAW Table 2.1. and paragraph 2.1.3. of AFI 13-112 Volume 1					
<input type="checkbox"/>	10.	Chief JTAC-I request a formal evaluation (IAW AFI 13-112, Volume 2) from the unit's Stan/Eval section Signature: _____					
<input type="checkbox"/>	11.	Successfully complete a formal performance evaluation from Standardization and Evaluation, IAW AFI13-112 Volume 2					
<input type="checkbox"/>	12.	Commander's certification, CMR JTAC Signature: _____					
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
TRAINEE NAME			CFETP/JQS NUMBER			PAGE NO.	

## Chapter 3

### MISSION QUALIFICATION TRAINING

**3.1. General.** JTAC MQT provides the training necessary to initially qualify or re-qualify JTACs in specific duty position(s) and controller duties required to perform unit assigned missions. MQT builds upon training received during IQT. Unit JTAC MQT programs require Group approval. Completion of JTAC MQT is a prerequisite for JTAC CMR status. **Note:** All controls in JTAC MQT will be graded using an ACC Form 206.

3.1.1. JTAC MQT requirements are listed in **Table 2.1**. Tasks listed as MQT requirements that are accomplished during the formal JTAC qualification course do not need to be reaccomplished during MQT. Base the unit's JTAC MQT program on the unit's DOC statement (may include forecasted contingency missions not identified in the unit's DOC statement). Training will be documented on AF IMT 797 (or unit approved automated products) and maintained in the individual's JTAC evaluation folder.

3.1.1.1. Training tasks will be accomplished to the standards listed in Table 2.1. Successful completion of required TACTICS modules requires passing of both the academic and task evaluation portions of the module.

3.1.2. Units will develop blocks of instruction covering areas pertinent to the unit's mission as determined by the unit commander. This training will be identified in the unit's applicable OI that governs its individual JTAC training program.

### 3.2. Initial JTAC MQT.

3.2.1. Prospective JTACs must complete Initial JTAC MQT within 180 days. Timing starts upon successful completion of the JFCOM-accredited formal training school. JTACS who exceed 180 days in MQT must have training time extended/adjusted IAW paragraphs 1.2.10. and 1.2.11. to continue in training.

3.2.2. Prospective JTACs must successfully complete a minimum of four graded terminal attack controls in the I-FACT or ACC-approved simulator. Training will be documented on an ACC Form 206. If an approved simulator is not available, the use of live-fly aircraft or CAS Practical Exercises is authorized.

3.2.3. Initial JTAC MQT consists of the number and type of successful graded terminal attack controls not accomplished in IQT IAW Table 2.1. and paragraph 2.1.3. of this AFI. As necessary, prospective JTACs may accomplish more than the required minimum of 12 successful graded terminal attack controls during JTAC IQT/MQT, to ensure they are fully prepared for formal evaluation.

3.2.4. Upon completion of Initial JTAC MQT, the Chief JTAC-I will request a formal evaluation (IAW AFI 13-112, Volume 2) from the unit's Stan/Eval section. Initial JTAC MQT is complete when the individual is recommended for a formal JTAC evaluation.

## Chapter 4

### COMBAT MISSION READY REQUIREMENTS

**4.1. JTAC CMR Status.** JTAC CMR status is attained when an individual successfully completes IQT and MQT, passes a formal JTAC evaluation as outlined in AFI 13-112, Volume 2 and has the unit commander's certification. CMR JTACs are authorized to perform unsupervised terminal attack controls.

**4.2. JTAC Non-Combat Mission Ready (N-CMR) Status.** CMR JTACs will supervise all N-CMR JTACs performing terminal attack controls.

4.2.1. When a JTAC is placed in N-CMR status, the unit commander will place a MFR or AF Form 623A entry in the individual's JTAC evaluation folder, Part V.

4.2.1.1. The commander will decertify a JTAC when it is determined that the individual JTAC lacks the appropriate skill or abilities required to continue controlling aircraft. This documentation becomes a permanent part of the individual's JTAC evaluation folder. See paragraph 5.4. for details regarding JTAC decertification.

4.2.2. JTACs who fail to comply with currency requirements and/or the criteria listed in **Table 1.1.** lose their JTAC CMR status and are placed in N-CMR status. To regain CMR status, a JTAC must complete, at a minimum and under CMR JTAC supervision, the number and category (e.g., night, live, laser) of controls they failed to accomplish in the previous 6 months. Also see paragraph 5.2.1.2 for academic currency requirements. The control(s) must be recorded as a "supervised control" in the individual's CAS control log. The unit commander may direct additional training as required. Following the completion of all required training the commander will sign an MFR or annotate the AF Form 623A to be placed in the individual's JTAC evaluation folder, stating the individual has regained their CMR status. **Note:** JTACs who are N-CMR in excess of 60 consecutive months will re-accomplish all JTAC training beginning with IQT (see Chapter 2).

4.2.2.1. JTACs who are N-CMR for 24-60 consecutive months will accomplish the following:

4.2.2.1.1. Complete all lessons required for continuation training (Table 5.1) using TACTICS training modules for non-AFSOC units and unit training modules for AFSOC units. Successful completion of required training modules requires passing of both the academic and task evaluation portions of the module. **Note:** Units are allowed to tailor this portion of the program for these individuals based on prior qualification, experience, documented performance and formal training.

4.2.2.1.2. Successfully complete a minimum of six graded Type 1 or 2 terminal attack controls under supervision of a qualified JTAC-I. These six controls must include at least one control expending live or training ordnance, one control must be conducted at night and one control using a ground based laser. A JTACs first 90 day look back will be 90 days following his recertification. **Note:** One of the six terminal attack controls may be completed using bomber aircraft and three of the six controls must utilize fixed wing aircraft.

4.2.2.1.3. Upon completion of the requirements in paragraph 4.2.2.1. of this instruction by the N-CMR JTAC, the Chief JTAC-I will request a formal evaluation (accomplished IAW AFI 13-112, Volume 2) from the unit's Stan/Eval section. Following successful completion of the formal evaluation and certification by the unit commander, a JTAC regains his JTAC CMR status.

#### 4.2.2.2. Examples of regaining CMR status.

4.2.2.2.1. Example 1. SSgt Smith is a N-CMR JTAC because during the monthly look-back, SSgt Smith did not complete the night requirement in the last 6 months, but completed the live and laser requirements. SSgt Smith completed six controls. A MFR or AF Form 623A is placed in SSgt Smith's JTAC evaluation folder stating the N-CMR status. SSgt Smith must complete one successful night control under the supervision of a CMR JTAC to regain qualification. The unit commander signs a MFR or AF Form 623A entry in the JTAC evaluation folder to indicate SSgt Smith has regained CMR status.

4.2.2.2.2. Example 2. SSgt Smith is a N-CMR JTAC because during the monthly look-back, SSgt Smith completed only two controls in the last 6 months, but one control was a live, and the other was a night mission using laser target designation. A MFR or AF Form 623A is placed in SSgt Smith's JTAC evaluation folder stating the N-CMR status. SSgt Smith must complete four successful controls under the supervision of a CMR JTAC. The unit commander signs a MFR or AF Form 623A entry in the JTAC evaluation folder, Part V, to indicate SSgt Smith has regained CMR status.

## Chapter 5

### CONTINUATION TRAINING

**5.1. General.** This chapter outlines academic training, task performance, and terminal attack control mission requirements for CMR JTACs. Units must identify local and/or mission specific additional training requirements in the OI that governs their JTAC training program. JTAC continuation training (CT) begins the date following the initial /requalification control-phase evaluation. Initial annual CT requirements must be completed within 12 months of JTAC continuation training start date. Initial semiannual CT training requirements must be completed within 6 months of JTAC continuation training start date. Initial biennial CT requirements must be completed within 24 months of JTAC continuation training start date. Following initial JTAC certification/requalification, a JTAC must complete a minimum of two CT controls within 90 days (utilizing live-fly aircraft or ACC-approved simulator) and all semi-annual CT requirements (6 controls of actual live-fly aircraft) within 180 days from the date of the initial certification/requalification control-phase evaluation.

**Note:** Individuals using simulator controls to complete two CT controls every 90 days, may also count these controls toward the completion of task 5.12 in **Table 5.1**.

5.1.1. The number of terminal attack controls identified in this chapter is the minimum required for JTAC CT. Currency requirements in paragraph **5.3**, may not be waived. JTAC CT includes JTAC training and unit-specific training that is required to accomplish the unit's assigned missions. JTACs will complete all training requirements listed in **Table 5.1**, and this chapter in the specified training period unless an adjustment is approved IAW paragraph **1.2.11**. JTACs that do not complete training within the specified training period, including adjustments, are N-CMR until all training items are completed.

**5.2. Continuation Training Program.** **Table 5.1**, lists the minimum JTAC CT academics and tasks deemed critical and required for JTAC CT. Units will establish a training program to satisfy additional JTAC CT requirements identified on unit master task lists. Performance training tasks will have a task evaluation with a "go or No-Go" standard developed for that tasks.

5.2.1. Each academic training task will require successful completion of an examination (80 percent minimum to pass) and/or performance test.

5.2.1.1. Academic instructors will be JTAC-Is or those individuals identified in paragraph **1.2.3**.

5.2.1.2. If a CMR JTAC has not completed JTAC CT for an academic event, or cannot attain the minimum measurement standard, the individual is N-CMR. The unit commander or designated official must make an entry into the individual's JTAC evaluation folder (MFR or AF Form 623A) stating reason the member could not attain the standard. Individuals have 30 days to complete the retraining. If the individual cannot attain the standard after the 30 days, he is entered into JTAC N-CMR status IAW paragraph **4.2.1**. Unit commanders will determine the appropriate re-qualification program to return N-CMR JTACs to JTAC CMR standards and status (see paragraph **4.2**). Once the re-qualification program is complete, unit commanders will return JTACs to JTAC CMR status.

5.2.2. JTAC continuation training will be documented on AF IMT 1098.

**5.3. Terminal Attack Control Requirements.** See **Table 5.1**.



5.3.1. Units with a JFCOM accredited simulation device may replace a maximum of 2 live-fly CT controls per 6 month period. ***The following live-fly controls will not be replaced by simulation: three (3) fixed-wing, one (1) night and one (1) expenditure of live or training ordnance.***

5.3.2. In order to maintain JTAC currency, JTACs must complete a minimum of two terminal attack controls every 90-days using a sliding calendar (see paragraph 1.2.8.2.).

**5.4. JTAC Decertification.** Commanders will decertify JTAC certified personnel, in writing (MFR or AF Form 623A), when it is determined that the individual lacks the skills, abilities and/or is otherwise ineligible based on the requirements of Table 1.1. to continue providing terminal attack control of aircraft. This documentation becomes a permanent part of the individual's JTAC training record.

5.4.1. Decertified individuals are immediately removed from the JTAC program.

5.4.2. Commanders must approve, in writing (MFR or AF Form 623A), a decertified individual's re-entry into the JTAC program. This documentation becomes a permanent part of the individuals training record. Unit commanders will closely monitor training of previously disqualified individuals.

5.4.2.1. Commanders will work closely with the Chief JTAC-I and Chief of Stan/Eval to develop a specific training and evaluation program to re-certify the individual. This program will list every task and type/quantity of controls that must be completed.

5.4.2.1.1. Individuals who do not successfully complete the training and evaluation of paragraph 5.4.2.1. may receive one additional attempt to become re-certified, if recommended by the group commander.

5.4.2.2. Individuals who fail to successfully complete re-certification twice concurrently, are permanently decertified from JTAC duties.

5.4.2.2.1. Commanders of 1C4X1 personnel who are permanently decertified from JTAC duties, will remove the individuals AFSC and recommend the individual for retraining or separation IAW AFI 36-3208, *Administrative Separation of Airmen*. Commanders should consult with the local Staff Judge Advocate (SJA) before proceeding with any action to separate an individual.

5.4.3. Certified 1C4X1 JTACs who refuse to perform JTAC duties will be permanently decertified. Commanders of these individuals will remove the individuals AFSC and recommend the individual for retraining or separation IAW AFI 36-3208. Commanders should consult with the local SJA regarding possible disciplinary action for individuals who refuse to perform JTAC duties before proceeding with any action to retrain or separate an individual.

**Table 5.1. Joint Terminal Attack Controller Continuation Training Program**

TRAINING ITEM	TYPE	FREQUENCY
<b>1. Plan, develop, and assess CAS requirements in support of the ground combat maneuver plan.</b> TR: JP 3-09.3; AFTTP 3-1, Vol 26; AFTTP(I) 3-2.6; AFI 11-214; AFI 13-212, Vols 1 and 3; FM 101-5; FM 1-112; JP 3-09		
1.1. Coordinate the integration of the following systems with CAS to support the commander's concept of operations.		
*1.1.1. Artillery and mortars	Academic	Biennial
*1.1.2. Attack helicopters	Academic	Biennial
*1.1.3. Unmanned aerial systems	Academic	Biennial

*1.1.4. Naval surface fires support	Academic	Biennial
*1.2. Interpret fire support coordinating measures and their impact on CAS mission planning.	Academic	Biennial
*1.3. Interpret airspace control measures and their impact on CAS mission planning.	Academic	Biennial
<b>2. Conduct target analysis relative to CAS in order to make weaponeering recommendations for the employment of CAS.</b> TR: JP 3-09.3; AFTTP 3-1, Vols 1, 3, 5 and 26, AFI 13-212, Vols 1 and 3; FM 6-20; FM 6-20-10		
*2.1. Locate, validate, and recommend potential CAS targets for suitability in accordance with the AGM.	Academic	Biennial
*2.2. Understand air-to-ground weapons and effects.	Academic	Biennial
*2.3. Understand CAS aircraft capabilities and tactics.	Academic	Biennial
*2.4. Understand weapons effect minimum safe distances.	Academic	Biennial
<b>3. In preparation for CAS, advise the ground maneuver element commander on the proper employment of CAS assets in support of the ground combat maneuver plan.</b> TR: JP 3-09.3; AFTTP 3-1, Vol 26; FM 3-09.31; FM 6-20-40; FM 6-20-50; FM 7-20		
3.1. Assess effects of the following on CAS capabilities and advise the unit commander accordingly.		
*3.1.1. Weather and terrain	Academic	Biennial
*3.1.2. Threat air defenses	Academic	Biennial
*3.2. Explain effects of aviation ordnance in order to recommend appropriate ordnance to obtain desired weapons effects.	Academic	Biennial
<b>*4. Plan and coordinate CAS missions in support of the ground combat maneuver plan.</b> TR: JP 3-09.3; AFTTP(I) 3-2.6; FM 1-112; FM 3-09.12; FM 101-5 (Notes 1 and 3)		
4.1. Plan day CAS missions.		
4.1.1. Fixed wing	Academic/Task	Annual
4.1.2. Rotary wing	Academic/Task	Annual
4.2. Plan night CAS missions.		
4.2.1. Fixed wing	Academic/Task	Annual
4.2.2. Rotary wing	Academic/Task	Annual
4.3. Plan adverse weather CAS missions.	Academic/Task	Annual
<b>TRAINING ITEM</b>	<b>TYPE</b>	<b>FREQUENCY</b>
4.4. Plan day CAS missions, using JAAT tactics.	Academic/Task	Annual
4.5. Plan night CAS missions, using JAAT tactics.	Academic/Task	Annual
4.6. Plan adverse weather CAS missions, using JAAT tactics.	Academic/Task	Annual
4.7. Plan CAS missions using laser guided munitions.	Academic/Task	Annual
4.8. Plan CAS missions using laser target designation for employing laser spot tracker equipped aircraft.	Academic/Task	Annual
4.9. Plan required coordination for coordinate-dependant weapons deliveries (e.g. JDAM, WCMD).	Academic/Task	Annual
4.10. Plan AC-130 fire missions.	Academic/Task	Annual

4.11. Plan required coordination for integrated attack by multiple fire support assets (artillery, mortars, attack helicopters, NSFS, etc.) to support CAS with target marking, SEAD, and illumination.	Academic/Task	Annual
4.12. Derive accurate target location and match target location format to weapons system (i.e. A-10, F-16, B-52 etc.)	Academic/Task	Annual
4.13. Plan CAS mission utilizing Joint Fires Observer (JFO) to provide targeting information and observe ordnance effects.	Academic/Task	Annual
4.14. Plan CAS mission utilizing FAC-A.	Academic/Task	Annual
4.15. Plan a CAS mission using a UAS.	Academic/Task	Annual
4.16. Plan a CAS mission utilizing live streaming video.	Academic/Task	Annual
<b>5. Provide terminal control of CAS missions in support of the ground combat maneuver plan.</b> TR: Joint Pub 3-09.3; JP 3-09.1; AFTTP(I) 3-2.6; AFTTP 3-1, Vol 26. See <b>Note 1</b>		
*5.1. Demonstrate the procedures for a type 3 control. ( <b>Note 3</b> )	Task	Annual
*5.2. De-conflict assets in target area to include: ( <b>Note 3</b> )		
5.2.1. Aircraft-to-aircraft	Task	Annual
5.2.2. Aircraft-to-aircraft munitions	Task	Annual
5.2.3. Aircraft and direct/indirect fires	Task	Annual
*5.3. Coordinate attack of the following fire support systems to support CAS with target marking, SEAD, and illumination. ( <b>Note 3</b> )		
5.3.1. Artillery and mortars	Task	Annual
5.3.2. Attack helicopters	Task	Annual
5.3.3. Naval surface fires systems	Task	Annual
*5.4. Control aircraft employing non-precision munitions: MK-series, CBU's, rockets, etc. (simulated or actual munitions). Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. ( <b>Note 3</b> )	Task	Annual
*5.5. Control aircraft employing precision guided munitions: LGBs, Maverick, etc. (simulated or actual munitions). Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. ( <b>Note 3</b> )	Task	Annual
*5.6. Control aircraft employing coordinate-dependant munitions (simulated or actual munitions). Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. ( <b>Note 3</b> )	Task	Annual
*5.6.1. Obtain precise target coordinates utilizing a near-mensuration system (i.e. PSS-SOF).	Task	Semi-Annual
<b>TRAINING ITEM</b>	<b>TYPE</b>	<b>FREQUENCY</b>
*5.7. Control the following CAS missions using JAAT tactics: ( <b>Note 3</b> )		
5.7.1. Day	Task	Annual
5.7.2. Night	Task	Annual
5.7.3. Adverse weather	Task	Annual
*5.8. Control AC-130 fire missions. ( <b>Note 3</b> )	Task	Annual
*5.9. Control Terminal Attack Control (TAC) Mission (Type 1 or Type 2 procedures). Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. Coordinate attack by multiple fire support systems (artillery, mortars, attack helicopters, NSFS) to support CAS with target marking, SEAD, and illumination (actual or simulated). Deconflict assets in target area to include: a) aircraft to aircraft; b) aircraft and aircraft munitions; and c) aircraft and direct/indirect fires. ( <b>Note 4</b> )	Task	Six controls every six months

*5.9.1. Control day TAC mission. Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles.	Task	Every six months
*5.9.2. Control night TAC mission. Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles.	Task	Every six months
*5.9.3. Control TAC mission employing live ordnance. Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles.	Task	Every six months
*5.9.4. Control Type 1 TAC mission (live fly only).	Task	Every six months
*5.9.5. Control Type 2 TAC mission (live fly only).	Task	Every six months
*5.10. Control adverse weather TAC mission. Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. ( <b>Note 3</b> )		
5.10.1. Through weather	Task	Annual
5.10.2. Under weather	Task	Annual
*5.11. Control TAC mission using ground-based laser target designation with laser spot tracker equipped aircraft or aircraft delivering laser-guided munitions. Ensure proper ordnance selection and adjustment, final attack clearance, abort procedures, minimum safe distances, and final attack headings/angles. ( <b>Note 3</b> , however, live is preferred).	Task	Annual
*5.12. Control two (2) simulator TAC missions. (These simulator controls are a separate requirement from the 2 controls on a JFCOM accredited simulation device authorized to replace 2 live-fly controls every 6 months referenced in Paragraph 5.3.1.) (also see paragraph 5.1.) ( <b>Note 5</b> )	Task	Every six months
*5.13. Control Type 2 or 3 TAC mission using a JFO ( <b>Note 3</b> ).	Task	Every six months
*5.14. Control a CAS mission utilizing live streaming video ( <b>Note 3</b> )	Task	Every six months
*5.15. Control UAS CAS mission ( <b>Note 3</b> )		
*5.15.1. Utilizing a UAS as a targeting aid during control of strike aircraft	Task	Annual
*5.15.2. Utilizing an armed UAS as the strike aircraft	Task	Annual
*5.16. Control a CAS mission utilizing a FAC-A ( <b>Note 3</b> )	Task	Annual
<b>TRAINING ITEM</b>	<b>TYPE</b>	<b>FREQUENCY</b>
*5.17. Conduct a CAS mission utilizing service digital CAS system (e.g. TACP-CASS) ( <b>Note 3</b> )	Task	Annual
<b>*6. Conduct post-strike assessment.</b> TR: Joint Pub 3-09.3 ( <b>Note 1</b> )		
6.1. Provide input into the battle damage assessment (BDA) and follow-up entry into the targeting process.	Task	Annual
6.2. Complete a Mission Report (MISREP) and re-attack recommendation for BDA.	Task	Annual
6.3. Route MISREP in accordance with JP 3-09.3.	Task	Annual

**NOTES:**

1. JTAC supervision is not required to log task for currency as long as the JTAC has met the frequency requirements for the specific Mission Task.
2. Academic portions of training items will be completed on an annual basis unless the item is academic

only and the frequency column specifies something different. For items that are Task only or Academic/Task the Frequency column only applies to the Task.

\*3. May be completed Live (i.e., using live-fly aircraft, actual equipment) or Virtual (i.e., approved simulators or a CAS Practical Exercise) **Note:** applies to task only.

4. Of the six live-fly terminal attack controls required every six months: Two must be with manned fighter/attack aircraft, up to two can utilize attack helicopters, up to one can utilize AC-130 aircraft, up to one can utilize UAS aircraft, up to two can utilize bomber aircraft (see paragraph 1.2.9.) and up to two can be accomplished using a JFCOM accredited simulator (see paragraph 5.3.1.)

\*5. If an approved simulator is not available, the use of live-fly aircraft or CAS Practical Exercises is authorized.

## Chapter 6

### JTAC EVALUATION FOLDER

**6.1. Purpose.** To properly document accomplishment of JTAC certification and qualification (currency) standards, JTAC evaluation folders will be initiated at the USAF JTAC schoolhouse (by unit, if JTAC attends sister service schoolhouse) and maintained by the units in accordance with this instruction. This folder will hold all records and correspondence dealing with an individual's JTAC training and Stan/Eval history and will be maintained by the Chief JTAC-I. Each JTAC-I will coordinate inputs to an individual's JTAC evaluation folder with the Chief JTAC-I/supervisors/unit training managers as appropriate. See paragraph 1.8. for disposition instructions on JTAC evaluation folders for individuals who PCS/PCA/retire/separate.

6.1.1. When a JTAC deploys, he will hand carry a copy of his JTAC evaluation folder to the deployed location. The copy may be hardcopy or in electronic format (i.e. .pdf).

6.1.2. Unit commanders will ensure the individual's original JTAC evaluation folder is updated within 30 days after the authorized reconstitution period.

**6.2. Description of Folders.** Until an electronic version of the JTAC evaluation folder is approved for use, each JTAC must have a hard copy JTAC evaluation folder, including those on inactive status. Folders will be a six-part sectional, letter size, with standard 2 3/4-inch metal fasteners at the top to hold documents. A label bearing the individual's name and rank will be affixed to the inside back cover so that the folder can be identified when filed. Each folder will have a Privacy Act Statement label attached to it.

6.2.1. Folder Organization. The JTAC evaluation folder will contain a 6-part documentation system. This is mandatory for all JTACs.

6.2.1.1. Part I. TABLE OF CONTENTS.

6.2.1.2. Part II. COMMANDERS DESIGNATION LETTERS, contains the JTAC's current designation letters, any previous designation letters (i.e. Stan/Eval and JTAC-I) and related appointment memorandums.

6.2.1.3. Part III. CAS LOG, contains a record of all JTAC controls in legible format, and must contain all JTAC controls performed, regardless of training phase (Chief JTAC-I will include an MFR explaining undocumented JTAC controls). Use the TACTICS CAS Log (non-AFSOC units), or JTAC Control Log (Figure 1.4.) to document JTAC controls.

6.2.1.3.1. The JTAC Control Log/TACTICS will be annotated following mission completion and placed in the individual's JTAC evaluation folder as required.

6.2.1.3.2. A printout of the TACTICS CAS Log, a JTAC Control Log or electronic copy must be made at least every six-months and prior to the individual JTAC's deployment, PCS or extended operational TDY (not required if destination location has access to TACTICS) and filed in Part III of the JTAC Evaluation Folder (see Table 1.2., rule 23). For units using TACTICS, a MFR will be placed in the JTAC evaluation folder, Part III, stating that the most accurate CAS control log is maintained on TACTICS.

6.2.1.4. Part IV. DOCUMENTATION OF EVALUATIONS. This section contains documentation of all evaluations conducted since initial qualification (see paragraph 4.2.1. in

AFI 13-112 Volume 2). Chief of Stan/Eval will provide an MFR for all missing evaluation records.

6.2.1.5. Part V. DOCUMENTATION OF TRAINING. All continuation training, refresher training to include academics and testing, and additional training required to remedy deficiencies identified during an evaluation.

6.2.1.5.1. For non-AFSOC units, a printout of the JTAC's TACTICS AF IMT 1098 must be done, as a minimum, every six months and prior to a JTAC's deployment (not required if destination location has access to TACTICS).

6.2.1.6. Part VI. JTAC FORMAL SCHOOL DIPLOMAS. Contains a copy of any JTAC Training Certificates received from a USJFCOM-accredited JTAC training school.

6.2.1.6.1. Include the AF IMT 2096, **Classification/On-the-Job Training Action**, or automated product which awarded the individual JTAC SEI 914, JTAC Instructor SEI 279, Chief JTAC Instructor SEI 280 and/or Standardization Evaluation Examiner SEI 281, or any official document stating the individual has these SEIs (e.g. VMPF/AMS surf/printout). **Note:** SEIs 279, 280 and 281 will be additive to the members list of qualified SEIs and not replace SEI 914.

## Chapter 7

### JOINT TERMINAL ATTACK CONTROLLER - INSTRUCTOR (JTAC-I) REQUIREMENTS

**7.1. General.** This chapter provides guidance for the prerequisites and training for the joint terminal attack controller-instructor (JTAC-I), Chief JTAC-I and JTAC Schoolhouse Instructor. ACC is the lead command for JTAC training, and ACC/A3 is the approval authority for all USAF JTAC course syllabi and issues pertaining to JTAC IQT.

**7.2. JTAC-I Prerequisites and Certification.** Commanders, with recommendations from the Chief JTAC-I, will select only the best-qualified individuals to conduct JTAC training based on the criteria listed below.

7.2.1. Enlisted personnel and ANG Battalion Air Liaison Officers, AFSC 16G3U, must have two years CMR JTAC experience. ALOs, AFSC 11XXU/12XXU, with previous CAS aircrew experience and one year of JTAC or FAC(A) experience may be selected as a JTAC-I.

7.2.1.1. Group commanders may waive up to one year of CMR JTAC experience for enlisted JTAC-Is.

7.2.2. Individual must meet trainer and certifier status IAW AFI 36-2201, Volume 3, or have attended a military aircrew instructor course, or served as a flight instructor.

7.2.3. Individual must maintain JTAC CMR status.

7.2.4. Completing a formal instructor course is highly desirable for JTAC-Is. Some examples are, but not limited to, Basic Instructor Course (BIC) E3AIR3S200-087; Classroom Instructor Course (CIC) Y120022; Academic Instructor Course (AIC); ANG Instructor Qualification Course (YTEC ICP); civilian teacher certification, or any equivalent Army/Air Force/civilian instructor training course (e.g. United States Air Force Weapons Instructor Course).

7.2.5. Pass an instructor evaluation initially, documented on AF Form 8 and thereafter in conjunction with the recurring JTAC mission evaluation (see paragraph 2.2.2. and Table 2.1., Area 26 in AFI 13-112 Volume 2).

7.2.6. DELETED

**7.3. Chief JTAC-I Prerequisites and Certification.** Due to the critical nature of terminal attack control, unit commanders will select only their best-qualified individual, based on the criteria below, to run the unit's JTAC training program.

7.3.1. Individual must have two years experience as a JTAC-I. Enlisted personnel must be a 7-level in their control AFSC.

7.3.2. The individual must meet requirements in paragraphs 7.2.3. and 7.2.5. in this AFI.

7.3.3. DELETED

**7.4. Formal Schoolhouse JTAC-I.** The 6th Combat Training Squadron (CTS) is the Air Force lead schoolhouse responsible for maintaining syllabi, lesson plans and course documents for JTAC IQT training. All other USAF JTAC schoolhouses will coordinate annually with 6 CTS to ensure standardization in course content and relevance of information. Recommended changes to course content, focus, and lesson material made must be coordinated with the 6 CTS. All syllabus changes must be approved by the ACC/A3.



7.4.1. All schoolhouse instructors must complete an approved formal instructor-training course such as the CIC, BIC, AIC or equivalent DoD/civilian instructor training course (e.g. United States Air Force Weapons Instructor Course).

7.4.2. Instructor Certification List (letter of X's). The commander or designated representative will maintain a document, which reflects the blocks of instruction each instructor is certified or in training to teach. Certified instructors are annotated with an "X". Augmentee instructors who do not perform classroom instruction are not required to be listed on the letter of X's but must hand carry a copy of their JTAC Evaluation Folder to the schoolhouse to verify their qualification as a JTAC-I.

7.4.3. New schoolhouse instructors will be trained and certified as listed below.

7.4.3.1. Observe. Coordinate with the block's primary or alternate instructor to obtain an overview of the block of instruction, any lesson materials, and any insights to the lesson. Review all parts of the block of instruction to include: objectives, samples of behavior (SOB), student workbook, presentation, exam questions, and reference materials/documents/publications for the class/ simulator profile. Observe the block of instruction being presented to students.

7.4.3.1.1. The new instructor's supervisor will notify the commander's designated representative upon completion of this phase. This is indicated on the Letter of X's by a "T" when completed.

7.4.3.2. Prepare. Prepare for presentation of the intended block of instruction using all available visual aids, practice giving the presentation emphasizing the SOBs and allowing time for student questions. Preparation will include presenting the intended block of instruction to the primary/alternate instructor, if available, otherwise, any qualified instructor. The supervising instructor will grade the presentation and provide appropriate feedback. The instructor in training will take and pass all academic/performance tests, used to measure the subject areas of responsibilities. A 90 % or better is required on academic tests and will be annotated in the instructor training record.

7.4.3.2.1. The new instructor's supervisor will notify the commander's designated representative upon completion of this phase indicating the new instructor is ready to teach the block under supervision. This is indicated on the Letter of X's by a "T1" when completed.

7.4.3.3. Teach. The new instructor will teach a class/simulator profile to actual students under unit commander approved supervision.

7.4.3.3.1. The unit scheduler will annotate 'T2' on the Letter of X's and schedule when the new instructor is ready to teach the block of instruction. The supervising instructor will document the assessment on AETC IMT 281, *Instructor Evaluation Checklist*.

7.4.3.4. Certify. Following a successful "T2" assessment, the new instructor's Letter of X's will be updated with an "X" in the appropriate block of instruction. The commander or designated representative will certify the new instructor by signing the updated Letter of X's and documenting the certification in section IV of AETC IMT 10, *Instructor Training/ Proficiency Record*, in the instructor's training record.

7.4.4. JTAC schoolhouse instructors may not perform unsupervised instruction until certified. Instructors who are teaching or supervising Type 1 and 2 controls must be JTAC qualified and will maintain JTAC currency requirements (paragraph 5.3.). Instructor augmentees who supervise Type

1 and 2 controls must be JTAC qualified and will maintain JTAC currency requirements (paragraph 5.3.).

7.4.5. Schoolhouse commanders will designate primary and alternate block instructors who are responsible for lesson plan accuracy and conformity to approved syllabus or plan of instruction.

7.4.6. Periodic Assessments. All certified instructors will be assessed every 17 months, or more frequently as directed by the commander. The Chief, JTAC-I, CC, DO or ADO will conduct the assessment. Refer to ACCI 36-2250, chapter 3, paragraph 3.2.4 for further information or appropriate MAJCOM Training references. Document the assessments in the individual's training folder using an AETC IMT 281.

7.4.6.1. Assessments and informal feedback may be conducted outside the formal assessment process. If an instructor has been identified as needing to improve instruction by student critique or by another instructor, they will be referred to the Chief JTAC-I for assessment and corrective action.

7.4.7. Instructor Currency. Formal Schoolhouse JTAC-Is are required to teach in their qualified areas with no more than 180 days between classes. If a JTAC-I does not meet this currency requirement, they must be retrained IAW paragraph 7.4.3.

7.4.8. Maintaining Instructor Training Records (ITR). An ITR will be maintained at the schoolhouse for all instructors. The folder will be organized into a 4-part documentation system.

7.4.8.1. Part I: Instructor Training Record. An AETC IMT 10 (or ACC/A3Y-approved form) will be used to document the instructor training and proficiency. Information from this form will be used to update the Letter of Xs.

7.4.8.2. Part II: Instructor Assessments. An AETC IMT 281 will be used to document all instructor assessments.

7.4.8.3. Part III: Formal Instructor Training Certificate.

7.4.8.4. Part IV: Other Training Course Certificates. Place any other formal training course certificates in this section that add to an instructor's capability as an instructor or subject matter expert. Examples are Test and Objectives, Test and Measurement, Marine TACP Course.

Table 7.1. **DELETED**

## Chapter 8

### THEATER AIR CONTROL TRAINING INFORMATION COMPUTER SYSTEM (TACTICS)

**8.1. General.** TACTICS has been developed to enhance the training capability of the TACP and ASOC community. The intent of TACTICS is to provide members with global, standardized, web-based training, and the ability to track this training. TACTICS is located on the Internet at <https://www.tactics-training.com/kc/login/login.aspx>

**8.2. Responsibilities for TACTICS.** The responsibilities for use of TACTICS are as follows:

8.2.1. ACC/A3YC will:

8.2.1.1. Be responsible for overall control and management (to include updates) of the TACTICS system.

8.2.1.2. Grant, upon request, Level II access for TACTICS on a need-to-have basis.

8.2.1.3. Provide direction and prioritization of module production.

8.2.2. Commanders will:

8.2.2.1. Ensure that units use TACTICS.

8.2.2.2. Utilize TACTICS to track individual/unit training status.

8.2.3. Level II/Administrators will:

8.2.3.1. Ensure that personnel are knowledgeable of TACTICS.

8.2.3.2. Ensure that incoming personnel are registered in the TACTICS system and that their personal information is correct.

8.2.3.3. Upon PCS, transfer personnel registered in the TACTICS departing the unit to their gaining unit.

8.2.3.4. Track individual/unit training progress and report any negative trends to the commander.

8.2.3.5. Use their chain of command to request any upgrades to Level II access.

8.2.3.6. Contact technical support at [techsupport@odysseyconsult.com](mailto:techsupport@odysseyconsult.com) if problems operating TACTICS occur.

8.2.4. Standard Users/Students will:

8.2.4.1. Upon PCS, contact the gaining Unit Training Manager to ensure that their registration in TACTICS was transferred.

8.2.4.2. Maintain current e-mail addresses for themselves and their supervisor in the TACTICS system (This is a priority).

8.2.4.3. Maintain current student profile information.

8.2.4.4. Read the system messages each time they login to stay aware of course additions and updates.

8.2.4.5. Contact technical support at [techsupport@odysseyconsult.com](mailto:techsupport@odysseyconsult.com) if problems operating TACTICS occur.

## Chapter 9

### INFORMATION COLLECTION, RECORDS AND FORMS

**9.1. Information Collections.** No information collections are created by this publication.

**9.2. Records.** The program records created as a result of the processes prescribed in this publication are maintained in accordance with AFMAN 37-123 (will convert to AFMAN 33-363) and disposed of in accordance with the AFRIMS RDS located at [https://afrims.amc.af.mil/rds\\_series.cfm](https://afrims.amc.af.mil/rds_series.cfm).

**9.3. Forms** (Adopted and Prescribed).

9.3.1. Adopted Forms. AETC 281, **Instructor Evaluation Checklist**, AF 623A, **On-The-Job Training Record**; AF IMT 689, **Task Performance Checklist**; AF IMT 797, **Job Qualification Standard/Command (JQS)**; AF Form 847, **Recommendation for Change of Publication**; AF IMT 942, **Record of Evaluation**, AF IMT 1098, **Special Task Certification and Recurring Training**; AF IMT 2096, **Classification/On-The-Job Training Action**, AF IMT 3130, **General Purpose (11 X 8 1/2")**; AF IMT 3827, **Terminal Attack Control Evaluation and Certification**, AF IMT 4144, **Positional Evaluation Checklist**; ACC Form 206, **Individual Mission Grade-Sheet**; DD Form 1972, **Joint Tactical Air Strike Request**.

9.3.2. Prescribed Forms. No forms are prescribed by this publication.

DANIEL J. DARNELL, Lt Gen, USAF  
DCS, Operations, Plans & Requirements

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

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**Note:** Access to Field Manuals (FM) requires use of an Army Knowledge Online account, <https://www.us.army.mil/appiansuite/login/login.fcc>

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JCAS AP MOA, Joint Close Air Support (JCAS) Action Plan (AP) Memorandum of Agreement (MOA) for Joint Terminal Attack Controller (JTAC) (Ground) (<https://www.my.af.mil/gcss-af/afp40/USAF/ep/globalTab.do?command=org&channelPageId=-1746022> ), click on “Memorandums of Agreement” (requires Common Access Card logon)

**Note:** Joint Publications can be found at [http://www.dtic.mil/doctrine/s\\_index.html](http://www.dtic.mil/doctrine/s_index.html).

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### ***Abbreviations and Acronyms***

**ACC**—Air Combat Command

**AFDD**—Air Force Doctrine Document

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFPAM**—Air Force Pamphlet

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**AFSC**—Air Force Specialty Code

**AFSOC**—Air Force Special Operations Command

**AFTTP**—Air Force Tactics, Techniques, and Procedures

**AFTTP(I)**—Air Force Tactics, Techniques, and Procedures (Interservice)

**AGM**—Attack Guidance Matrix

**ALO**—Air Liaison Officer

**ANG**—Air National Guard

**ASOC**—Air Support Operations Center

**BALO**—Battalion Air Liaison Officer

**BDA**—Battle Damage Assessment

**BIC**—Basic Instructor Course

**BMNT**—Begin Morning Nautical Twilight

**C2**—Command and Control

**CAS**—Close Air Support

**CCO**—Combat Control Operator

**CIC**—Classroom Instructor Course

**CMR**—Combat Mission Ready

**CT**—Continuation Training

**CTS**—Combat Training Squadron

**DOC**—Designed Operational Capability

**EENT**—End of Evening Nautical Twilight

**(FAC(A))**—Forward Air Controller (Airborne)

**FM**—Field Manual

**IAW**—In Accordance With

**IMT**—Information Management Tool

**IQT**—Initial Qualification Training

**IR**—Infrared

**JAAT**—Joint Air Attack Team

**JDAM**—Joint Direct Air Munitions

**JFCOE**—Joint Forces Center of Excellence

**JFCOM**—Joint Forces Command

**JP**—Joint Publication

**JQS**—Job Qualification Standard

**JTAC**—Joint Terminal Attack Controller

**JTAC—I**—Joint Terminal Attack Controller - Instructor

**JTAR**—Joint Tactical Airstrike Request

**JTTP**—Joint Tactics Techniques and Procedures  
**MAJCOM**—Major Command  
**MDMP**—Military Decision Making Process  
**MDS**—Mission Design Series  
**MISREP**—Mission Report  
**MOA**—Memorandum of Agreement  
**MQT**—Mission Qualification Training  
**N-CMR**—Non-Combat Mission Ready  
**NGB**—National Guard Bureau  
**NSFS**—Naval Surface Fire Support  
**NTC**—National Training Center  
**OI**—Operating Instruction  
**OPLAN**—Operations Plan  
**OPR**—Office of Primary Responsibility  
**ORM**—Operational Risk Management  
**P**—Prerequisite  
**PA**—Privacy Act  
**PCA**—Permanent Change of Assignment  
**PCS**—Permanent Change of Station  
**PE**—Practical Exercise  
**PR**—Personnel Recovery  
**SEAD**—Suppression of Enemy Air Defense  
**SEI**—Special Experience Identifier  
**SJA**—Staff Judge Advocate  
**SOF**—Special Operations Forces  
**TAC**—Terminal Attack Controller; Terminal Attack Control  
**TACCS**—Tactical Air Command and Control Specialist  
**TACP**—Tactical Air Control Party  
**TACTICS**—Theater Air Control Training Information Computer System  
**TDY**—Temporary Duty  
**TM**—Training Manager  
**TR**—Training Regulation  
**UAS**—Unmanned Aircraft System



**UCMJ**—Uniformed Code of Military Justice

**USMC**—United States Marine Corps

**UTA**—Unit Training Assemblies

**UTC**—Unit Type Code

**WCMD**—Wind Corrected Munitions Delivery

### *Terms*

**Air Liaison Officer (ALO)**—The senior tactical air control party member who functions as the primary advisor to the ground commander on air power. An air liaison officer is usually an aeronautically rated officer however, 16G3Us, ANG Career BALOs, are non-rated (JP 1-02). The following AFSCs may be assigned the suffix “U” for ALO; 11BXX, 11EXX, 11FXX, 11HXX, 11KXX, 11RXX, 11SXX, 11UXX, 12BXX, 12EXX, 12FXX, 12RXX, 12SXX, 12UXX, 13BXX and 13LXX (when established).

**Air Support Operations Center (ASOC)**—The principal air control agency of the theater air control system responsible for the direction and control of air operations directly supporting the ground combat element. It processes and coordinates requests for immediate air support and coordinates air missions requiring integration with other supporting arms and ground forces. It normally collocates with the Army tactical headquarters senior fire support coordination center within the ground combat element. (JP 1-02)

**Battalion Air Liaison Officer (BALO)**—

**Officer**—A 16G3U (ANG only) who performs liaison duties at the battalion level and ALOs (11/12XXU) permanently assigned to a Ranger Battalion are the only personnel authorized to perform BALO duties.

**Enlisted**—A Technical or Master Sergeant with an AFSC of 1C471, a graduate from the E3ACP1C471-001 or L3ACP1C471-0T0A, Tactical Air Command and Control Craftsman Course or Tactical Air Control Party Craftsman Course, and who performs liaison duties at the battalion level. Enlisted personnel who perform BALO duties are permanently aligned with Army battalions and perform full-time BALO duties.

**Begin Morning Nautical Twilight (BMNT)**—The start of that period where, in good conditions and in the absence of other illumination, enough light is available to identify the general outlines of ground objects and conduct limited military operations. Light intensification devices are still effective and may have enhanced capabilities. At this time, the sun is 12 degrees below the eastern horizon. (JP 1-02)

**Certified (JTAC)**—An individual who satisfactorily completes the appropriate Service academic and practical training requirements of a core JTAC training curriculum and completes a comprehensive evaluation may be granted JTAC certification. (JTAC MOA)

**Chief Joint Terminal Attack Controller—Instructor (Chief JTAC-I)**—A highly qualified individual appointed by the unit commander who is responsible for the unit’s JTAC training program. Ensures the requirements of AFI 13-112, Volume 1, are implemented and oversees the training and utilization of unit’s joint terminal attack controller-instructor(s).

**Close Air Support (CAS)**—Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. (JP 1-02)

**Combat Control Operators (CCO)**—Directs and controls the delivery and battlefield application of lethal and non-lethal airpower. Uses visual and electronic aids to control airhead in the area of responsibility. Establishes long-rang command and control (C2) communications and intelligence nets. (AFMAN 36-2108)

**Continuation Training (CT)**—Required to maintain duty position qualification and proficiency.

**Control**—A control consists of at least one aircraft attacking a surface target. The control begins with a CAS briefing (the 9-line is the JP 3-09.3 standard) from a JTAC and ends with either an actual/simulated weapons release or an abort on a final attack run. No more than two controls can be counted per CAS briefing per target. (JTAC MOA)

**Day Terminal Attack Control**—Day terminal attack control is a control of CAS aircraft at a point after Begin Morning Nautical Twilight (BMNT) and prior to End of Evening Nautical Twilight (EENT).

**End of Evening Nautical Twilight (EENT)**—Occurs when the sun has dropped 12 degrees below the western horizon, and is the instant of last available daylight for the visual control of limited ground operations. At the EENT there is no further sunlight available. (JP 1-02)

**Forward Air Controller (Airborne)**—A specifically trained and qualified aviation officer who exercises control from the air of aircraft engaged in close air support of ground troops. The forward air controller (airborne) is normally an airborne extension of the tactical air control party. (JP 3-09.3)

**Joint Terminal Attack Controller (JTAC)**—A qualified (certified) Service member who, from a forward position, directs the action of combat aircraft engaged in close air support and other offensive air operations. A qualified and current joint terminal attack controller will be recognized across the Department of Defense as capable and authorized to perform terminal attack control.

**Joint Terminal Attack Controller—Instructor (JTAC-I)**—A highly qualified individual recommended by the unit Chief JTAC-I and appointed by the unit commander who provides training to unit JTACs. Responsible for implementing the training as required by this AFI and developed by the unit's Chief JTAC-I.

**Joint Terminal Attack Controller Combat Mission Ready (JTAC CMR)**—A status of a JTAC who is fully qualified to perform the unit's operational mission, maintains qualification and proficiency in the mission, has been evaluated IAW AFI 13-112, Volume 2, and has commander certification.

**Joint Terminal Attack Controller Initial Qualification Training (JTAC IQT)**—A formal training process consisting of a JFCOM accredited JTAC Qualification Course designed to initially qualify a JTAC in terminal control duties without regards to the unit's operational mission.

**Joint Terminal Attack Controller Mission Qualification Training (JTAC MQT)**—Training required to achieve a basic level of competence in JTAC requirements and in a unit's primary tasked missions. This training is a prerequisite for JTAC CMR status.

**Joint Terminal Attack Controller Non—Combat Mission Ready (JTAC N-CMR)** – Individuals are placed in JTAC N-CMR status after failing to complete academic/proficiency training or currency requirements within the allotted training cycle. Individuals must complete required training IAW paragraph 4.2.2. to regain JTAC CMR status. JTACs in a JTAC N-CMR status for more than 24 months but less than 60 months must comply with paragraph 4.2.2.1.

**Laser Terminal Attack Control**—Laser terminal attack control is control of CAS aircraft using a laser target designation device or terminal guidance for air-to-ground munitions. Continuation training laser controls may be live, virtual or constructive however, live is preferred. A laser terminal attack control is

defined as control of CAS aircraft using ground-based laser designation equipment where the JTAC has direct or indirect control over activation and deactivation. Such equipment may be, but not limited to, the PEQ-1, GLTD II or MULE.

**Live Terminal Attack Control**—Live terminal attack control is control of aircraft where air-to-ground munitions (live, inert or training ordnance) are released from the aircraft.

## **Live, Virtual and Constructive Training**

**Live**—Live training is that which is conducted in a physical environment. It normally occurs on ranges/maneuver areas or in a Military Operating Area (MOA). (i.e. JTACs on a range conducting a live-fly CAS mission or JTACs using a laser target designator on a range)

**Virtual**—Virtual training provides crews, leaders and units with realistic training experiences using a variety of means ranging from the use of sophisticated simulators to practical exercises. Simulators operating on virtual terrain take the place of weapon systems and can be linked to expand the scope of the training event (i.e. JFCOM accredited simulator).

**Constructive**—Constructive simulation training is the use of computer models and game-type simulations. These tools permit multiple echelons of command and staff to execute their normal warfighting tasks in an unconstrained exercise environment (i.e. Battle Command Training Plan Exercises).

**Night Terminal Attack Control**—Night terminal attack control is control of CAS aircraft at a point beyond EENT and prior to BMNT, with or without the use of night observation devices or Infrared (IR) designators.

**Practical Exercise (PE)**—A CAS mission PE is a comprehensive training event that includes all areas of mission planning, coordination, and execution, but does not involve control of actual aircraft. The CAS mission PE is intended to make the most effective use of available training sorties by allowing personnel to become familiar with tactics, techniques and procedures prior to an actual mission. Each CAS mission PE could have several different outcomes/training objectives based on the instructor's inputs. The PE provides instant feedback to an instructor and trainee in those areas needing improvement. Instructors use actual mission profiles and mission-related information to familiarize the trainee with what to expect during all phases of mission execution. Additionally, PEs can be used to complete identified CT requirements when live-fly aircraft, equipment or ranges are not available to complete live training and the training objectives can be met by a combination of discussion, demonstration and/or performance of the tasks.

**Proficiency**—Any training event in excess of the required number for currency that enhances the skills of the individual.

**Qualified (JTAC)**—A certified JTAC who has maintained currency by achieving the established minimum recurring training and evaluation requirements. (JTAC MOA)

**Special Tactics Officer**—Provides assault zone reconnaissance and assessments, terminal control, and personnel recovery (PR). Manages day-to-day operations of PR activities to coordinate PR system and organize, train and equip assigned personnel to conduct rescue and surveys, establishes, and controls the aerospace surface interface in objective areas. Deploys as a team member, team leader or mission commander as a direct combatant or to command and battle staffs to provide subject matter expertise to plan for and manage command and control for special reconnaissance, terminal control and PR operations. (AFMAN 36-2105)

**Tactical Air Command and Control Specialist (TACCS)**—Performs and manages TACP operations. Provides Air Force assistance and expertise in planning and controlling combat air resources. Operates and supervises communications nets to support army ground maneuver units. (AFMAN 36-2108)

**Tactical Air Control Party (TACP)**—A subordinate operational component of a tactical air control system designed to provide air liaison to land forces and for control of aircraft (JP 3-09.3). TACP is the principal Air Force liaison element aligned with Army maneuver units from battalion through corps and consists of air liaison officers and enlisted joint terminal attack controllers. TACPs advise ground commanders on the capabilities and limitations of aerospace power and provide the primary Air Force terminal attack control of CAS missions (AFDD 2-1.7).

**Terminal Attack Control Currency**—A JTAC must perform at least two terminal attack controls every 90 days (utilizing live-fly aircraft or an ACC-approved simulator), and six controls (utilizing live-fly aircraft) every six months for a minimum total of twelve controls utilizing live-fly aircraft per year using a sliding calendar. Units will conduct monthly look-backs.

**Type 1 Control**—Is used when the JTAC must visually acquire the attacking aircraft and the target for each attack. Analysis of attacking aircraft geometry is required to reduce the risk of the attack affecting friendly forces. Language barriers when controlling coalition aircraft, lack of confidence in a particular platform, ability to operate in adverse weather, or aircrew capability are all examples where visual means of terminal attack control may be the method of choice (JP 3-09.3, Change 1).

**Type 2 Control**—Is used when the JTAC requires control of individual attacks and any or all of the following conditions exist:

**Type 3 Control**—Is used when the JTAC requires the ability to provide clearance for multiple attacks within a single engagement subject to specific attack restrictions. Like Type 1 and 2, only a JTAC can provide Type 3 control. During Type 3 control, JTACs provide attacking aircraft targeting restrictions (e.g., time, geographic boundaries, final attack heading, specific target set, etc.) and then grant a “blanket” weapons release clearance (“CLEARED TO ENGAGE”). Type 3 control does not require the JTAC to visually acquire the aircraft or the target; however, all targeting data must be coordinated through the supported commander’s battle staff. The JTAC will monitor radio transmissions and other available digital information to maintain control of the engagement. The JTAC maintains abort authority. Observers may be utilized to provide targeting data and the target mark during Type 3 Control. Type 3 is a CAS terminal attack control procedure and should not be confused with TGO or air interdiction. (JP 3-09.3, Change 1)